The Pediatric Residency Training Program
of
Boston Children’s Hospital
Harvard Medical School
and
Boston Medical Center
Boston University School of Medicine

August 2014 edition

CLASS OF 2015-2016
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Boston Combined Residency Program

In the early 1990’s, David Nathan and Barry Zuckerman, the Chiefs of Services at Boston Children’s Hospital and Boston Medical Center, respectively, decided to combine two major medical schools (Harvard Medical School and Boston University School of Medicine) and two major hospitals (Boston Children’s Hospital and Boston Medical Center) to form the Boston Combined Residency Program in Pediatrics (BCRP), the first combined residency program in pediatrics in the US. The educational, clinical and research accomplishments of each institution formed the foundation for this collaborative venture. While hospital mergers to achieve fiscal viability were common events in the early 1990s, the BCRP merger had, at its core, a singular emphasis of pediatric education and was built upon the rich tradition of the previously separate training programs at Boston Children’s Hospital and Boston Medical Center. It was their belief that true educational excellence could be achieved by combining the culture of a public city hospital with that of a private subspecialty hospital. The BCRP, now in its 19th year, continues to flourish and adapt to the changing elements of pediatric training. The program supports the diverse interests of our house staff by providing them with clinical experiences at both the institutions coupled with exposure to our dedicated pediatric faculty.

Boston Children’s Hospital

1869-1881

Soon after the Civil War, in 1869, Dr. Francis Henry Brown organized a small group of Harvard Medical School graduates joined by Boston’s civic leaders to establish a 20 bed Children’s Hospital in a townhouse on Rutland Street in Boston’s South End. The hospital treated just 30 patients that first year. One year later the Children’s Hospital relocated to a larger building on the same street. The patients were predominately Irish immigrants and many had traumatic injuries or infectious diseases. Philanthropy completely supported the new hospital. Sister Theresa and the Anglican Order of the Sisters of St. Margaret oversaw the nursing care of the children for the first 45 years of the hospital’s existence.

1882-1913

By 1882 having outgrown its current structure, the hospital was moved to Huntington Avenue near the current Symphony Hall. This larger building was designed especially for children’s needs. As the range of illnesses grew, so did the professional staff. Between the years 1882 and 1914 the practice of pediatrics was recognized as a specialty and Harvard Medical School made its first appointment of a physician devoted solely to the care of children. The first medical house officers (interns and externs) were appointed and a nursing school was opened to educate nurses.

1914-1945

In the early 1900s Harvard Medical School moved to the former Ebenezer Francis Farm, its current site, and in
1914 the Children’s Hospital relocated to its current address on Longwood Avenue immediately next to the Medical School. During this era the Hunnewell building housed the children until a series of “cottages” were built to minimize the spread of infection. These “cottages” housed medical, surgical and orthopedic patients. Departments now differentiated into Surgery, Medicine, Radiology, Orthopaedics, and Pathology to mention only a few. Cystic fibrosis, erythroblastosis fetalis and other diseases were described and studied. Pediatric medicine subspecialized into metabolism, hematology and bacteriology. Surgeons developed new techniques for repairing congenital abnormalities. The field of cardiac surgery was begun and the iron lung for polio victims was developed by physicians at Children’s Hospital and the Harvard School of Public Health. Harvard medical students began to learn pediatrics at the Children’s Hospital. The housestaff grew from 3-4 in 1900 to over 30 in the early 40s. Women became residents when men left to serve in World War II. The Medical & Nursing Alumni Associations were established. During this period, Children’s Hospital forged strong bonds with other institutions including the House of the Good Samaritan (for rheumatic fever patients), the Sarah Fuller School (for deaf children), the Judge Baker Children’s Center (for psychiatric illness) and the Sharon Sanatorium. Remarkably, in 1939 the average cost of a hospital visit was just $1.50.

1946-1990
During the years 1946 to 1990 the Children’s Hospital was well positioned to take a leadership role in pediatric health. Experienced physicians returned from the military service. The NIH established programs to support academic research. The Children’s Hospital organized itself into the Children’s Hospital Medical Center. The hospital endorsed specialized pediatric care, and began the construction of new buildings: the Farley inpatient building (in 1956), the Fegan outpatient building (in 1967), the Martha Eliot Health Center (in 1967), and the Enders research building (1970) named for Dr. John Enders, recipient of the Nobel Prize for his work with polio virus. In 1987 a new inpatient facility was built bringing the number of inpatient beds to 330. Old diseases such as polio, measles, pertussis, meningitis, pneumonias, and epiglottis decreased in prevalence because of vaccines, and new antibiotics, only to be replaced by new diseases like HIV, Kawasaki’s, substance abuse, and the autism spectrum disorders. The faculty in all departments grew rapidly. The medical housestaff by 1990 numbered over 86 residents. All subspecialties had developed outstanding fellowships. The hospital was now a primary education site for Harvard medical students and elective students from throughout the US, and Children’s Hospital enjoyed both a national and international reputation.

1990-Present
The years since 1990 have seen increasing excellence in patient care, great research productivity, new medical innovations, and remarkable contributions to pediatric medical education. Children’s Hospital clinicians have pioneered lung, liver, and multiple organ transplants, innovative procedures for short gut syndrome, surgery using robotics and lasers, the development of tissue engineered organs, the use of small devices to repair holes in the heart, hydroxyurea to treat sickle cell disease, gene therapy, novel treatments for vascular malformations, and fetal intervention for hypoplastic left heart syndrome, among others. Children’s researchers have developed treatments for blood disorders, regenerated damaged nerves, identified genes associated with specific diseases, developed new vaccines for serious illnesses, created disease-specific human stem cells, invented genomic tools to classify tumors and identify new drug therapies, and developed whole new fields, such as angiogenesis.
Children's Hospital Milestones

1869 Boston Children’s Hospital opens as a 20-bed facility at 9 Rutland Street in Boston’s South End.

1891 Children's establishes the nation's first laboratory for the modification and production of bacteria-free milk.

1920 Dr. William Ladd devises procedures for correcting various congenital defects such as intestinal malformations, launching the specialty of pediatric surgery.

1922 Dr. James Gamble analyzes the composition of body fluids and develops a method for intravenous feeding that saves the lives of thousands of infants at risk of dehydration from diarrhea.

1932 Dr. Louis Diamond characterizes Rh disease, in which a fetus’s blood is incompatible with its mother’s. Diamond later develops exchange transfusion to treat the disease.

1938 Dr. Robert Gross performs the world’s first successful surgical procedure to correct a congenital cardiovascular defect, ushering in the era of modern pediatric cardiac surgery.

1947 Dr. Sidney Farber achieves the world’s first successful remission of acute leukemia. He goes on to found the Dana-Farber Cancer Institute.

1954 Dr. John Enders and his colleagues win the Nobel Prize for successfully culturing the polio virus in 1949, making possible the development of the Salk and Sabin vaccines. Enders and his team went on to culture the measles virus.

1971 Dr. Judah Folkman publishes “Tumor angiogenesis: therapeutic implications” in the New England Journal of Medicine. It is the first paper to describe Folkman’s theory that tumors recruit new blood vessels to grow.

1978 Dr. Stuart Orkin develops restriction endonuclease mapping to diagnose thalassemia in utero.

1983 Children’s physicians report the first surgical correction of hypoplastic left heart syndrome, a defect in which an infant is born without a left ventricle. The procedure is the first to correct what previously had been a fatal condition.

1985 The Howard Hughes Medical Institute funds a major research program in molecular genetics, the first HHMI program at a pediatric hospital.

1986 Drs. Louis Kunkel and Stuart Orkin and their research teams develop the technique of positional cloning to identify the genes responsible for Duchenne muscular dystrophy and chronic granulomatous disease, respectively.

1989 Researchers in Neurology and Genetics discover that beta amyloid, a protein that accumulates in the brains of people with Alzheimer's disease, is toxic to neurons, indicating the possible cause of the degenerative disease.

1990 Dr. Joseph Murray, chief of Plastic Surgery emeritus, wins the Nobel Prize for his pioneering work in organ transplantation.

1996 Boston Combined Residency Program formed.

1996 Dr. Michael Greenberg discovers that mice lacking the transcription factor fosB have no nurturing instinct.

1998 Dr. Anthony Atala successfully transplants laboratory-grown bladders into dogs, a major advance in the growing field of tissue engineering.

1999 Dr. Todd Golub first uses gene expression microarrays to differentiate cancers.

2000 Dr. Frederick Alt finds that end-joining proteins maintain the stability of DNA, helping to prevent the chromosomal changes that precede cancer.

2001 Children’s performs the world’s first successful fetal repair of hypoplastic left heart syndrome in a 19-week-old fetus.

2002 Dr. Nader Rifai co-authors a landmark study showing that a simple and inexpensive blood test for C-reactive protein is a more powerful predictor of a person’s risk of heart attack or stroke than LDL cholesterol.

2003 Drs. Heung Bae Kim and Tom Jaksic develop, test and successfully perform the world’s first-ever serial transverse enteroplasty (STEP) procedure, a potential lifesaving surgical procedure for patients with short bowel syndrome.


2005 Dr. Stephen Harrison and colleagues show how a key part of the human immunodeficiency virus (HIV) changes shape, triggering other changes that allow the AIDS virus to enter and infect cells.

2006 Dr. Michael Greenberg discovers a brain-specific microRNA that regulates the development of dendritic spines in the brain that contribute to synaptic development and plasticity.

2006 Dr. Scott Armstrong identifies self-renewal genes that turn a normal blood cell progenitor into a leukemic stem cell.

2006 Dr. David Pellman discovers a set of genes whose loss is only lethal in hyperdiploid cells and are therapeutic targets in hyperdiploid cancer cells.

2006 Dr. Hannah Kinney links sudden infant death syndrome (SIDS) to abnormalities in the brainstem serotonin system, which regulates breathing, blood pressure, body heat and arousal.

2007 Charles Nelson proves that abandoned children do much better cognitively if moved from institutions to foster care.

2007 Dr. Len Zon discovers that prostaglandin E2 greatly stimulates the growth of blood and probably other tissue stem cells.

2007 Dr Morris White shows that blocking insulin receptor substrate-2 (IRS-2) signaling promotes healthy metabolism and considerably extends lifespan.

2007 Dr. Lois Smith finds that omega-3-polyunsaturated fatty acids reduce pathological retinal angiogenesis and are a potential therapy for retinopathy of prematurity.
Boston Medical Center

The establishment of Boston City Hospital in 1864 was a major accomplishment for the City of Boston. Boston City Hospital was the first municipal hospital established in the United States.

As a municipal institution, Boston City Hospital began to provide much needed health care to both the urban poor of Boston and the ever-increasing number of Irish Immigrants entering the city during the mid-19th century. Boston Medical Center, which is the result of the 1996 merger of Boston City Hospital and University Hospital, exists on the grounds of the original Boston City Hospital. In the first 50 years of its existence, Boston City Hospital did not have a Pediatric Service. Children were admitted to one of the four Medical or Surgical Services in wards that housed adults.

2008 Dr. George Daley discovers how to reprogram human somatic cells to pluripotent stem cells with defined transcription factors.
2008 Dr. Chris Walsh and his colleagues identify several genetic loci that cause autism.
2008 Dr. Rani George finds that activating mutations in the receptor tyrosine kinase ALK cause some cases of neuroblastoma.
2008 Drs Vijay Sankaran and Stuart Orkin discover that the fetal hemoglobin to adult hemoglobin switch is controlled by the BCL11A transcription factor. This solves a decades old problem in hematology and has important implications for the treatment of sickle cell disease and thalassemias.
2008 Dr. Zhi He observes that stimulation of the mTOR pathway increases axon regeneration after CNS injury.
2008 Manton Center for Orphan Disease Research founded.
2009 Immune Disease Institute joins Children's Hospital as the Program in Cellular and Molecular Medicine.

2009 Drs. George Daley and Richard Gregory show that the microRNA, Lin 28, plays an important role in germ cell development and cancer.
2009 Drs. Len Zon and George Daley discover that blood flow triggers development of hematopoietic stem cells.
2011 Drs. Luigi Notarangelo, Sung-Yun Pai and David Williams achieve the first successful treatment of severe combined immunodeficiency by gene therapy in the US.
2012 Dr. Heung Bae Kim develops novel method to stretch arteries in vivo for repair of arterial defects.
2012 Standardized Clinical Assessment and Management Plans (SCAMPS) method developed for reducing costs and variability of care and improving outcomes.
2013 Drs. Amy Starmer, Ted Sectish and Chris Landrigan develop a patient handoff method (I-PASS) that greatly reduces medical errors and preventable adverse events.
2014 Drs Jeff Burns and Tracy Wolbrink launch OPENPediatrics, an innovative web-based digital learning platform linking physicians and nurses across the world.

In 1919 Boston City Hospital determined that two buildings, near the site of the current Menino Pavilion would be dedicated to the care of children and this began the Pediatric Service. With support from the City of Boston, funds were earmarked for a free standing Children’s Building, and in honor of the wife of Mayor Curley, the Mary E. Curley Pavilion for Children opened in 1932. This nine story facility housed a Walk-In Clinic, an Ambulatory Clinic and a large inpatient Pediatric ward service, which occupied five stories of the Curley Pavilion. A number of the current faculty provided care in the Curley Pavilion.
Over the years, the Pediatric Service at Boston City Hospital has continued its long tradition of providing service and patient care to the residents of Boston. The Department continues to be a national leader in areas of advocacy, urban health and health care services. Since its inception under Dr. Martin J. English in 1923, and the continued leadership of the preeminent pediatricians of their time — Drs. Eli Friedman, Sydney Gellis, Horace Gezon, Joel Alpert and Barry Zuckerman — the mission of the department has continued to be integrated with the changing needs of our patient population. The Department remains committed to solving the health care challenges of the urban poor and focuses its clinical and research expertise in topics such as racial disparities, malnutrition, infectious diseases, childhood obesity, autism and medical informatics. While the landscape of Boston has seen many changes in the 150-year history of Boston City Hospital/Boston Medical Center, the consistent mission of the Department of Pediatrics remains imbedded in the framework of the families and children they serve.

Boston Medical Center Milestones

1848 The Boston Female Medical College is established as the first medical school created for educating women physicians. It later became the New England Female Medical College.

1850 Samuel Shattuck, known as the Father of Public Health, is the primary author of the “Report of the Sanitary Commission of Massachusetts.”

1873 Boston University merges with the New England Female Medical College to establish the Boston University School of Medicine.

1897 Dr. Solomon Carter Fuller, who would become the nation’s first black psychiatrist, graduates from the BUSM. A pioneer in Alzheimer’s research, Dr. Fuller was an early proponent of minority recruitment.

1946 Dr. Sydney Gellis becomes Chief of the Department of Pediatrics at Boston City Hospital. Dr. Gellis was the 1959 President of the Society for Pediatric Research and would later become Dean of BUSM in 1962.

1970 Under the direction of Dr. Robert Klein, the Dept of Pediatrics at Boston City Hospital developed one of the first childhood lead poisoning programs in the nation.

1972 Dr. Joel Alpert becomes Chief of Pediatrics and in 1973 was awarded funding from RWJ to develop primary care residency training. Dr. Alpert and Dr. Alan Cohen (BCH Medicine) then received the first Federal Funding for the first Primary Care Residency Training Program in the nation, and the Pediatrics Dept at BCH developed a national reputation for residency training in primary care and community based pediatrics.

1974 Dr. Jerry Klein describes his work on occult bacteremia in the New England Journal of Medicine. Dr. Klein was the 2002 recipient of the prestigious Maxwell Finland Award for Lifetime Achievement in Pediatric Infectious Disease.

1982 Dr. Barry Zuckerman establishes a Developmental and Behavioral Pediatric Fellowship Program that has trained over 35 leaders in DBP across the nation.

1989 Drs. Robert Needleman and Barry Zuckerman, with colleague Kathleen Fitzgerald Rice, begin Reach out and Read (ROR) in the primary care practice at BCH. In 1998, ROR received federal funding to establish a national model combining literacy education promoted by pediatricians. Currently there are more than 4500 sites, serving more than 5 million children nationally. 28,000 pediatricians, nurses and other clinicians have been trained in the ROR strategy of early literacy.

1989 The Pediatric HIV program joins the NIH network to develop new approaches to the treatment and prevention of HIV. Under the leadership of Jerome Klein and Steve Pelton, the division participates in landmark studies of AZT in the newborn infant and helps to establish the Women and Infants study of vertical transmission.

1990 Hortensia Amaro establishes the MOM’s Project, a community-based intervention program aimed at improving birth outcomes and reducing drug use among pregnant women by linking them with healthcare services, social service supports, counseling and peer support.

1993 Barry Zuckerman becomes Chief of Pediatrics and establishes the Family Advocacy Program. This unique collaboration between lawyers and pediatricians, now called the Medical-Legal Partnership for Children (MLPC), provides direct, proactive legal assistance in the clinical setting to families at Boston Medical Center. The MLPC also educates health care professionals to identify non-medical barriers to a patient’s health and to incorporate advocacy as part of their treatment plan. In 2007 the Robert Wood Johnson and Kellogg Foundations provided support to establish the National Center of MLP to disseminate the model nationally. Presently there are over 220 MLP Programs.

1994 With $40 million support from the Commonwealth Fund and other fdns, Drs. Barry Zuckerman, Steven Parker, Marilyn Augustyn and Margot Kaplan-Sanoff developed and implemented Healthy Steps at 12 sites nationally.

1996 Boston Combined Residency Program (BCRP) formed.

1996 Boston Medical Center (BMC) was created by the merger of Boston City Hospital and University Hospital.

1996 Project Health Project HEALTH (Helping Empower, Advocate and Lead through Health), currently called Health Leads, is founded by Rebecca Onie as a collaboration of Harvard undergraduates and Boston Medical Center’s Department of Pediatrics. It has grown to a network of college volunteers and health care mentors that aid inner-city children and families.
1997 Children’s Sentinel Nutritional Assessment Program formed. CSNAP (currently renamed Children’s Healthwatch) is a multisite surveillance program of children birth to 3 years of age that monitors the impact of economic conditions and public policies on the health and well-being of very young children.

1999 Under the direction of Dr. Bobbi Philipp, BMC became the first hospital in New England to achieve Baby-Friendly status, fully implementing the Baby-Friendly Hospital Initiative, Ten Steps to Successful Breastfeeding.

2004 Drs. Chi Huang and CC Lee establish the Global Child Health Initiative at Boston Medical Center and the BCRP.

2004 Boston University School of Medicine is designated as the new site for the National Emerging Infectious Diseases Laboratories (NEIDL). This will be one of only four non-governmental Biosafety level 4 laboratories in North America. Designed to anticipate the research needs of investigators over the next 20 years, the lab will engage in cutting-edge research into diagnostic tests, treatments and vaccines for emerging infectious diseases.

2004 Department of Pediatrics establishes the SPARK Center. The Spark Center (a merger of two innovative programs: the Children’s AIDS Program and the Family Development Center) is a model childcare program offering comprehensive, integrated services for children and families whose lives are affected by medical, emotional and/or behavioral challenges.

2005 The Medical Legal Partnership for Children received funding to establish a national center directed by Ellen Lawton, J.D. and Lauren Smith, M.D. There are now Medical Legal Partnerships for Children in over 180 hospitals and health centers serving children and vulnerable adult populations.

2006 During the first 10 years of its formal organization, 15 members of the Division of General Pediatrics received 18 career development awards from the NIH and various foundations.

2008 Boston University School of Medicine is awarded a Clinical and Translational Science Institute named the BU-BRIDGE from the NIH. The focus of this 7 million dollar award is to increase the amount of translational research done at BUSM/BMC.

2009 Project HEALTH received a $2M grant from the Robert Wood Johnson Fdn to support the Family Help Desk model in other institutions. Today, Project HEALTH’s 600 college volunteers staff Family Help Desks in 6 cities that assist over 4,500 patients and their families annually in securing health related community resources.

2011 Drs. Julie Herlihy and Bob Vinci establish a 4-yr Child Global Health Residency in collaboration with the Center for Global Health and Development at the BU School of Public Health.

2011 Dr. Howard Bauchner is named the 16th Editor in Chief of the Journal of the American Medical Association.

2013 Dr Bob Vinci becomes the Chief of Pediatrics at Boston Medical Center and the Boston Univ School of Medicine.

2013 Dr. Debra Frank is the recipient of the AMA 2013 Excellence in Medicine Award.

2014 The Department of Pediatrics received the 2014 APA Health Care Delivery Award.
Program Directors

Ted Sectish

Dr. Ted Sectish is Professor of Pediatrics, Vice-Chair for Education and Program Director of the pediatric residency training program at Boston Children’s Hospital. He came to Children’s and the BCRP from Stanford Medical School, where he directed the pediatric residency program for 14 years. Dr. Sectish, is a distinguished educator in pediatrics and the winner of many teaching awards. He obtained his MD degree from Johns Hopkins and was an intern and resident in pediatrics at Boston Children’s Hospital from 1977 to 1980. He spent 13 years as a general pediatrician in Salinas, California before becoming the program director at Stanford. Dr. Sectish has written extensively about residency education, including an article on making pediatric residency programs family friendly, an area of special interest to him (J Pediatr 149: 1-2, 2006). His interest in educational innovation and improvement spans the continuum from undergraduate medical education to graduate medical education and the professional development of practicing physicians. His recent focus is as one of the leaders of the I-PASS Study, a multi-site collaborative research project to standardize the handoff process to reduce medical errors and improve the workflow of residents (JAMA. 2013;310:2262-70). He was the Executive Director of the Federation of Pediatric Organizations (FOPO) from 2007-2014. FOPO serves the pediatric community with its Task Forces on Women in Pediatrics and Diversity and Inclusion and its Strategic Initiatives. It hosted a Visioning Summit in 2013 on the Future of the Workforce in Pediatrics. As the Past-President of the Association of Pediatric Program Directors, Dr. Sectish has been involved in national issues related to graduate medical education, including the formation of the Council of Pediatric Subspecialties, which will serve as a home for pediatric subspecialists and fellowship directors. He is a member of the American Pediatric Society.

Bob Vinci

Dr. Bob Vinci has spent his entire academic career at Boston Medical Center (formerly Boston City Hospital) and the Boston University School of Medicine (BUSM). He obtained his medical degree from the Rutgers Medical School, now the Robert Wood Johnson Medical School, and was a Pediatric Resident at Boston City Hospital from 1980 to 1983. He served one year as a Pediatric Chief Resident at BCH, and then joined the faculty at BUSM in 1984. Dr. Vinci is an accomplished clinician. He developed the Division of Pediatric Emergency Medicine at BCH/BUSM and in 1987 established the Fellowship Program in Pediatric Emergency Medicine at BCH. After serving the Department of Pediatrics as Vice Chairman for Clinical Services for over 17 years, Dr. Vinci was recently appointed the Chair of the Department of Pediatrics at Boston Medical Center and the Joel and Barbara Alpert Professor and Chair of the Department of Pediatrics at Boston University School of Medicine. Dr. Vinci has been involved in residency education for over 20 years and began his commitment to residency education when he served as the Program Director for the pediatric training program at Boston City Hospital and Boston Medical Center. Along with Fred Lovejoy, he established the Boston Combined Residency Program in 1996 and has served as a Program Director for the BCRP since its inception. His areas of interest include academic development of physicians, (J Pediatr 152: 599-600, 2008), offering flexible training options for pediatric residents (Pediatrics 122: e938-44, 2008) and the enhancement of systems to decrease medical errors. Dr. Vinci is a member of the Association for Pediatric Program Directors, where he currently serves on the National Board of Directors, the American Academy of Pediatrics and the American Pediatric Society. He has been married to his wife Debra for 34 years and they have three children, Allyson (age 32), Laura (age 30) and Sam (age 25). They frequently open their house for theme dinners for residents in the BCRP.
Residency Program Leadership

Gary R. Fleisher, MD
Physician-in-Chief & Chair, Dept of Medicine
Boston Children’s Hospital

Robert J. Vinci, MD
Chair, Dept. of Pediatrics
Boston Medical Center

Theodore C. Sectish, MD
Vice Chair for Education & Program Director, Boston Children's Hospital

Robert J. Vinci, MD
Program Director
Boston Medical Center

Vincent W. Chiang, MD
Assoc. Program Director
Boston Children's Hospital

Daniel J. Schumacher, MD, MEd
Assoc. Program Director
Boston Medical Center

Samuel E. Lux IV, MD
Director of Intern Selection
Boston Children's Hospital

Tanvi S. Sharma MD
Assoc. Program Director
Boston Children's Hospital

Daniel J. Schumacher, MD, MEd
Assoc. Program Director
Boston Medical Center

Thomas J. Sandora, MD, MPH
Assoc. Program Director
Boston Children's Hospital

Ariel S. Winn, MD
Assoc. Program Director
Boston Children's Hospital

Tanvi S. Sharma MD
Assoc. Program Director
Boston Children's Hospital

Catherine L. Distler MD
Assoc. Program Director
Boston Medical Center

Joyce Patterson
Program Coordinator
Boston Children's Hospital

Celeste R. Wilson, MD
Assoc. Chair, Intern Selection
Boston Children's Hospital

Pat Ciampa
Housestaff Coordinator
Boston Medical Center

Elayne Fournier
Intern Selection Coordinator
Boston Children's Hospital

Catherine L. Distler MD
Assoc. Program Director
Boston Medical Center

Susan Brooks
Housestaff Coordinator
Boston Children's Hospital

Colin M. Sox, MD, MS
Chair, Intern Selection
Boston Medical Center
Interns and Residents

We seek residents who are intelligent, curious, creative, energetic, personable, and accomplished. Residents who will become leaders in pediatrics. Residents with a sense of humor. We also seek residents who come from all parts of the country and beyond and who have a wide variety of backgrounds.

The 151 current residents illustrate our desire for diversity. They come from 31 states and 19 countries. They went to 84 colleges and 60 different medical schools, including 10 international schools. They majored in 47 diverse subjects in college—from history, sociology, political science, public health, environmental studies, government, literature, classics, languages, religion, gender studies, economics, business, education, nursing, journalism, anthropology, instrumental performance and art, to math, physics, chemistry, astrophysics, computer science and engineering. Plus all varieties of biological sciences. Thirty-seven have PhDs or PhD-like research experience and 18 have an MPH, MPhil, MA, MS, MSc, MPP, MPA, MBA or MEd. Many have years of experience before medical school in fields such as business, science, education, engineering, nursing, advocacy, and health care policy. Their interests are equally diverse. Among them, they speak 28 languages.

We believe this diversity greatly enriches the residency. It stimulates creativity, promotes tolerance, and allows residents to excel in various ways within the program. It also creates chances to try new things. Most importantly, perhaps, it offers opportunities to establish rich friendships. Nothing is more important in a residency than the quality of the other residents. They will become, in many cases, lifelong friends and colleagues. We believe that no pediatric program has better residents than the BCRP.

New Interns (Categorical Track)

Ali Alhassani, MD, MSc, MA
• Natick, MA
• MIT (Mechanical Engineering)
• Harvard Medical School

Alexandra (Ali) Baker, MD
• Falmouth, MA
• Cornell (Biology)
• Washington University in St Louis School of Medicine

Gal Ben-Josef, MD
• Tel Aviv, Israel → Huntington Woods, MI
• Washington University, St Louis (Chemistry & Spanish)
• Yale School of Medicine

Connie Choi, MD
• Schaumburg, IL
• Pennsylvania (Bioengineering)
• Northwestern University, Feinberg School of Medicine

Gabriela Cordova, MD
• Lima, Peru
• Universidad Peruana Cayetano Heredia Facultad de Medicina Alberto Hurtado

Elizabeth Duke, MD (Child Neurology)
• Nashville, TN → Baltimore, MD
• Duke (Psychology & Biology)
• University of Maryland School of Medicine

Jamie Eskuri MD (Child Neurology)
• Esko, MN
• College of Saint Benedict/Saint John's University (Biology)
• University of Iowa, Carver College of Medicine

Jonathan (Yoni) Gall, MD, PhD
• Kalamazoo, MI → Morristown, NJ
• Brown (Biology)
• Boston University School of Medicine
• PhD (Molecular Medicine)

Ulrike Gerdemann, MD
• Münster, Germany
• Charité-Universitätsmedizin Berlin Medizinische Fakultät

Nina Gold, MD (Pediatrics-Medical Genetics)
• Newton, MA
• Colby (Psychology)
• Harvard Medical School

Meredith Goodloe, MD
• Charlottesville, VA
• William & Mary (Biology & Hispanic Studies)
• University of Maryland School of Medicine

Sannya Hede, MD
• Mumbai, India → The Woodlands, TX
• Yale University (History & Biology)
• Baylor College of Medicine
Marguerite (Indriati) Hood, MD, PhD
- Seria, Brunei → Yarmouth, Nova Scotia
- Houghton (Biology)
- Vanderbilt University School of Medicine
- PhD (Pathology, Microbiology & Immunology)

Valerie Jacobs, MD, PhD (Child Neurology)
- Phoenix, AZ.
- Arizona State (Molecular Biosciences)
- Dartmouth, Geisel School of Medicine
- PhD (Neurosci, Pharmacol & Toxicology)

Fred Kieley, MD
- Edina, MN
- Carleton (Chemistry)
- Minnesota University School of Medicine

Jessica Lacy, MD
- Washington, DC → Tampa, FL
- Harvard (Chemistry)
- Harvard Medical School (Harvard-MIT Program)

Marcella Luercio, MD
- Fortaleza, Brazil → Fenton, MI
- Michigan-Flint (Molecular Biology)
- Case Western Reserve School of Medicine

Vanessa Mazandi, MD
- Boston, MA
- Yale (English & Teacher Preparation)
- Jefferson Medical College

Matthew (Matt) Meyers, MD, MPH
- Scranton, PA
- Univ of Pennsylvania (Biological Sciences)
- Commonwealth Med Col
- MPH, Johns Hopkins (Social & Behavioral Health/Epidemiology)

Kate Millington, MD
- Chatham, NY
- Bard College at Simon’s Rock (Liberal Arts)
- University of Pennsylvania, Perelman School of Medicine

Natalie Pica, MD, PhD
- New York, NY
- Georgetown (Biology)
- Mount Sinai, Icahn School of Medicine
- PhD (Virology)

John Prensner, MD, PhD
- Wellesley, MA
- Tufts (English Literature)
- University of Michigan Medical School
- PhD (Molecular and Cellular Pathology)

Robert (Rob) Przybylski, MD
- Royal Oak, MI
- Michigan (Biomedical Engineering)
- University of Michigan Medical School

Daniel (Dan) Quiat, MD, PhD
- Houston, TX
- University of Texas at Austin (Biology)
- University of Texas, Southwestern Med Sch
- PhD (Genetics and Development)

Jared Rowe, MD, PhD
- Alpharetta, GA
- Minnesota (Genetics, Cell Biology and Development)
- University of Minnesota Medical School
- PhD (Immunology)

Matthew (Matt) Rowland, MD (Pediatric Anesthesia)
- Yankton, SD
- Minnesota (Genetics, Cell Biology and Development)
- University of South Dakota, Sanford School of Medicine

Cynthia Schreiner, MD
- Cattaraugus, NY
- Clarkson (Bio-Molecular Science)
- University at Buffalo SUNY School of Medicine

Jessica Solomon, MD (Neurodevelopmental Disabilities)
- Cleveland, OH
- Vanderbilt (Special Education)
- Vanderbilt University School of Medicine

David (Dave) Somsen, MD
- Yankton, SD
- Minnesota (Genetics, Cell Biology and Development)
- University of South Dakota, Sanford School of Medicine

Richard Voit, MD, PhD
- Köln, Germany → Mt Pleasant, SC
- Texas-Dallas (Molecular Biology)
- University of Texas, Southwestern Med Sch
- PhD (Cell Regulation)

James Xie, MD (Pediatric Anesthesia)
- Switzerland → England → Burlingame, CA
- Stanford (Computer Science)
- Stanford University School of Medicine
New Interns (Urban Health and Advocacy Track)

**Zeena Audi, MD**
- Greenwich, CT
- Columbia (Neuroscience)
- Columbia University College of Physicians & Surgeons

**Joshua (Josh) August, MD**
- New Haven, CT
- Boston University (Human Physiology)
- Boston University School of Medicine

**Drisana Henry, MD, MPH**
- Springfield, MA
- Tufts (Clinical Psychology)
- Case Western Reserve University School of Medicine

**Michael (Mike) Hole, MD, MBA**
- Darlington, IN
- Butler (Biology & Spanish)
- Stanford University School of Medicine
- MBA, Stanford Graduate School of Business

**Lucy Marcil, MD, MPH**
- Columbia, SC
- Davidson (Interdisciplinary Studies)
- University of Pennsylvania, Perelman School of Medicine
- MPH, Johns Hopkins (Public Health)

**Nirmala (Neeru) Narla, MD**
- Chandler, AZ
- University of Arizona (Molecular and Cellular Biology & Economics)
- Mayo Medical School

**Ravikiran (Ravi) Raju, MD, PhD**
- Akron, OH → Bridgewater, NJ
- Harvard (Chemistry & Anthropology)
- Baylor College of Medicine
- PhD, Harvard (Biological Sci in Public Health)

**Kristin Schwarz, MD**
- Glastonbury, CT
- Notre Dame (Psychology)
- Boston University School of Medicine
- MA, Loyola (Medical Sciences)

**Tracy Seimears, MD**
- Elmira, NY → Renton, WA
- Washington (Evolution/Ecology & Business)
- University of Washington School of Medicine

**Igor Shumskiy, MD**
- Dnepropetrovsk, Ukraine → Denver, CO
- Colorado (Biochemistry & Mathematics)
- University of Colorado School of Medicine

**Alyssa Reyes Smith, MD**
- Bridgeport, CT
- Yale (Biomedical Engineering)
- University of Pennsylvania, Perelman School of Medicine

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New Interns (Medicine-Pediatrics Track)

**Viswatej (Vishu) Avutu, MD**
- Akiveedu, India → Round Rock, TX
- University of Texas at Austin (Biochemistry)
- University of Texas Southwestern Medical School

**Anne Beckett, MD**
- Phoenix, AZ
- Harvard College (Social Studies)
- Yale University School of Medicine

**Siobhan Case, MD**
- Omaha, NE → Seattle, WA
- Stanford (Human Biology)
- Yale University School of Medicine

**Melissa Lechner, MD, PhD**
- St Louis, MO
- University of California Berkeley (Public Health)
- University of Southern California, Keck School of Medicine
- PhD (Cancer Immunol)
Junior Residents (Categorical Track)

Katherine (Katie) Freund Brunsberg, MD
- Fond du Lac, WI
- Wisconsin (Zoology)
- University of Iowa Carver School of Medicine

Andrew Butler, MD
- Cherry Hill, New Jersey
- Rutgers (Genetics)
- Univ of Med & Dentistry of New Jersey, Robert Wood Johnson Med Sch
- Pediatric internship at St Christopher's Hospital for Children, Philadelphia

Margaret (Maggie) Chang, MD, PhD
- Taipei, Taiwan → Orange County, CA
- UCLA (Microbiology, Immunology & Genetics)
- UCLA School of Medicine
- PhD (Cellular & Molecular Pathology)

Paul Critser, MD, PhD
- Madison, WI → Indianapolis, IN
- Notre Dame (Chemical Engineering)
- Indiana University School of Medicine
- PhD, Purdue (Biomedical Engineering)

Suzanne Forrest, MD
- New Haven, CT
- Wellesley (History)
- Yale University School of Medicine

Paul Esteso, MD, PhD
- Mexico City → Florida
- Florida → Florida State (Chemical & Biomedical Engineering)
- Johns Hopkins University School of Medicine
- PhD (Cellular & Molecular Medicine)

Wesley Greenblatt, MS, MD
- Kearney, MO
- Yale, BS & MS (Molec Biophysics & Biochem)
- Harvard Medical School
- Pediatric internship at University of California, San Francisco

Meghan (Meg) Fredette, MD
- North Kingstown, RI
- Boston College (Biology)
- University of Connecticut School of Medicine

Taylor Howard, MD
- Waco, TX
- Baylor (Biology)
- University of Texas, Galveston School of Medicine

Kelsey Johnson, MD
- Wayzata, MN
- Yale (Economics)
- University of Pennsylvania School of Medicine

Brian Kalish, MD
- Medinah, IL
- Johns Hopkins (Public Health Studies)
- Harvard Medical School

Ashley Koegel, MD
- Santa Barbara, CA
- UCLA (Biochemistry)
- Stanford University School of Medicine

Laddy Maisonet, MD
- Carolina, PR
- Columbus College of Art & Design (Illustration)
- Kansas University School of Medicine

Joseph (Joe) Lazar, MD
- Garfield Heights, OH
- Columbia (Psychology)
- Columbia University College of Physicians & Surgeons

Jonathan Levin, MD
- East Meadow, NY
- Brown (Computational Biology)
- Yale University School of Medicine

Albert (Al) Kwon, MD
(Pediatric Anesthesia)
- Redwood City, CA → South Korea
- MIT (Biology)
- Harvard Medical School

Laddy Maisonet, MD
(Child Neurology)
- Carolina, PR
- Columbus College of Art & Design (Illustration)
- Kansas University School of Medicine
<table>
<thead>
<tr>
<th>Name</th>
<th>City, State</th>
<th>Institution(s)</th>
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</thead>
<tbody>
<tr>
<td>Amar Majmundar, MD, PhD</td>
<td>Jenkintown, PA</td>
<td>Temple (Biology)</td>
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<tr>
<td></td>
<td></td>
<td>University of Pennsylvania School of Medicine</td>
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<tr>
<td></td>
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<td>PhD (Cell &amp; Molecular Biology)</td>
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<td>University of Pennsylvania School of Medicine (Biology)</td>
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<tr>
<td>Nina Mann, MD</td>
<td>Lujiang, China →</td>
<td>MIT (Chemical Engineering)</td>
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<td></td>
<td>Barrington, RI</td>
<td>Harvard Medical School</td>
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<tr>
<td>Blake Martin, MD</td>
<td>Englewood, CO</td>
<td>Princeton (Astrophysics)</td>
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<td>University of Colorado School of Medicine</td>
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<tr>
<td>Jheanelle Lewis McKay,</td>
<td>Clarendon, Jamaica</td>
<td>Jefferson Medical College (Biology)</td>
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<tr>
<td>MD</td>
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<td>Jefferson Medical College (Biology)</td>
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<tr>
<td>Ashish Massey, MD, PhD</td>
<td>New York City</td>
<td>Stony Brook (Biochem)</td>
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<td>Albert Einstein College of Medicine</td>
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<td></td>
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<td>PhD (Anatomy and Structural Biology)</td>
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<td>Pediatric internship at Duke</td>
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<tr>
<td>Nathaniel (Nate) Mosley,</td>
<td>Ellijay, GA</td>
<td>Georgia (Biochemistry &amp; Molecular Biology)</td>
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<tr>
<td>MD</td>
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<td>Medical College of Georgia</td>
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<tr>
<td>Edward (Ted) O’Leary, MD</td>
<td>New Bedford, MA</td>
<td>Boston College (Biology)</td>
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<td></td>
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<tr>
<td>Michelle Long Schoettler,</td>
<td>Groton, CT →</td>
<td>University of Puerto Rico (General Sciences)</td>
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<tr>
<td>MD</td>
<td>Tallahassee, FL</td>
<td>University of Puerto Rico School of Medicine</td>
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<tr>
<td>David (Dave) Shulman, MD</td>
<td>Needham, MA</td>
<td>Union College (Biology)</td>
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<td>Harvard Medical School</td>
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<tr>
<td>Ethan Sanford, MD (Pedia</td>
<td>San Antonio, TX</td>
<td>University of Puerto Rico (General Sciences)</td>
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<tr>
<td>Jennifer (Jenn) Smith, MD</td>
<td>Huntsville, AL</td>
<td>University of North Carolina (Physics)</td>
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<td>Coral Stredny, MD (Child</td>
<td>Dallas, PA</td>
<td>University of Scranton (Biochemistry)</td>
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<tr>
<td>Matthew (Matt) Vogt, MD,</td>
<td>St Louis, MO</td>
<td>Washington University, St Louis (Biology)</td>
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<td>Catherine (Cat) Taylor, MB</td>
<td>London, UK</td>
<td>Cambridge (Natural Sciences)</td>
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<tr>
<td>Amy Turner, MD</td>
<td>Landrum, SC</td>
<td>Clemson (Nursing)</td>
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<tr>
<td>Molly Wilson-Murphy, MD</td>
<td>Southborough, MA</td>
<td>Harvard College (Psychology)</td>
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<tr>
<td>(Child Neurology)</td>
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</tbody>
</table>
Junior Residents (Urban Health and Advocacy Track)

Rathi Asaithambi, MD, MPH
- Houston, TX
- Rice (Sociology & Religion)
- Baylor College of Medicine
- MPH, Johns Hopkins (Child & Adol Health)

Ioana Baiu, MD, MPH
- Bucharest, Romania → Madison, WI
- Wisconsin (Neurobiology, French)
- Harvard Medical School
- MPH (Health & Social Behavior)

Alexandra Coria, MD
- Pasadena, CA
- Brown (Environmental Studies)
- Dartmouth Medical School

Kristen Grant Deschene, MD
- St Louis, MO
- Dartmouth (Biology)
- Washington University, St Louis School of Medicine

Heather Hsu, MD, MPH
- Dedham, MA
- Brown (Gender Studies)
- Harvard Medical School
- MPH, Pittsburgh (Epidemiology)

Camila Mateo, MD
- Boca Raton, FL
- Florida (Health Sciences)
- Columbia University College of Physicians & Surgeons

Elyse Portillo, MD, MPH
- Albuquerque, NM → CA → Houston, TX
- University of Texas, Austin (Biology)
- Baylor College of Medicine
- MPH, Texas (Community Health Practice)

Theodora (Thea) Textor Murray, MD
- Sheboygan, WI
- Harvard College (Government)
- Boston University School of Medicine

Erlinda (Chulie) Ulloa, MSc, MD
- Orange, CA
- UCSD (Animal Physiology & Neuroscience, Psychology)
- Stanford University School of Medicine
- MSc (Microbiology & Immunology)

Erin West, MD
- Bayport, NY
- Fordham (Biology)
- Harvard Medical School

Caitlin Woo-Pierce, MD
- Andover, MA
- Bowdoin (Biology, Spanish)
- Albert Einstein College of Medicine
Junior Residents (Medicine-Pediatrics Track, Year 2)

Shoa Clarke MD, PhD
- Portland, ME
- Cornell (Biology, Health & Society)
- Stanford University School of Medicine
- PhD (Genetics)

Chase Yarbrough, MD
- Alpharetta, GA
- Stanford (Computer Science)
- University of Colorado School of Medicine

Darryl Powell, MD
- Philadelphia, PA
- Pennsylvania (Biological Basis of Behavior)
- University of Pennsylvania School of Medicine

Neelam Shah, MD
- Buffalo, NY → Alexandria, LA
- Pennsylvania (Biological Basis of Behavior)
- Johns Hopkins University School of Medicine

Junior Residents (Medicine-Pediatrics Track, Year 3)

Kristin Castillo MD, MA
- Macomb, IL
- Washington University, St Louis (Chemistry & Biochemistry)
- Harvard Medical School
- MA (Med Anthropology)

Michael (Mike) Sundberg, MD
- Lancaster, CA
- California State, Long Beach (Journalism & Molecular Biology)
- Stanford University School of Medicine

Elizabeth (Liz) Petersen, MD
- Stillwater, MN
- Gustavus Adolphus (Biology)
- University of Minnesota Medical School

Daniel (Dan) Schwarz, MD, MPH
- Waynesburg, PA
- Vassar (Neuroscience & Political Science)
- Warren Alpert Medical School of Brown University
- MPH, Harvard (Management and Policy)
Senior Residents (Categorical Track)

Gabriela (Gaby) Andrade, MD
- El Salvador → Nashville, TN
- North Carolina (Sociology & Chemistry)
- Vanderbilt School of Medicine

Eleni Asimacopoulou, MBBS
- Houston, TX
- Imperial College School of Medicine, London

Beate Beinvogl, MD
- Munich, Germany
- Technische Universität München School of Medicine
- Pediatric Residency (3-yr) Children's Hospital of Starnberg

Jessica Brick, MD
- Cleveland, OH
- Case-Western Reserve (Biology & Religion)
- Case-Western Reserve University School of Medicine

Christine Cherella, MD
- Warwick, RI
- Harvard (Biological Sciences)
- Northwestern University Feinberg School of Medicine

Suzanne Chock, MD
- Mountain Home, Arkansas
- Harvard (Biochemistry)
- Columbia Univ College of Physicians & Surgeons
- Pediatric Internship at Children's Hospital of Philadelphia

Agnieszka Czechowicz, MD, PhD
- Minneapolis-St Paul, MN
- Stanford (Biology)
- Stanford University School of Medicine
- PhD (Developmental Biology)

Daniel (Pete) Duncan, MD
- New Haven, CT
- Stanford (Biological Sciences)
- Yale University School of Medicine

Adam Durbin, MD, PhD
- Toronto, ON
- York (Biochemistry and Molecular Biology)
- University of Toronto School of Medicine
- PhD (Oncology & Medical Biophysics)

Elissa Furutani, MD
- Concord, MA
- Princeton (History)
- Dartmouth Medical School

Amanda Gallant, MD
- Needham, MA
- Brown (Biochemistry)
- Boston University School of Medicine
- Pediatric Internship at Floating Hospital, Tufts School of Medicine

Laura Gellis, MD
- Newton, MA
- Pennsylvania (Biological Basis of Behavior)
- Albert Einstein College of Medicine

Claire Graff, MD
- Pittsburgh, PA
- Washington & Lee (Biology)
- University of Texas School of Medicine at San Antonio

Alexander (Alex) Hirsch, MD
- Houston, TX
- Pennsylvania (Biological Basis of Behavior)
- University of Pennsylvania School of Medicine

Holly Hodges, MD
- Starkville, MS
- Baylor (Biology)
- Baylor College of Medicine

Daniel (Danny) Hames, MD
- Omaha, NE
- Creighton (Physics)
- Creighton University School of Medicine

Alyssa Kennedy, MD, PhD
- Mohnton, PA
- Haverford (Molecular Biology)
- Drexel University College of Medicine
- PhD (Molecular Cell Biology )

Eliisa Furutani, MD
- Concord, MA
- Princeton (History)
- Dartmouth Medical School

Anuja Jain, MD, MEd
- Fremont, CA
- UCLA (Biology & Education)
- University of Michigan Medical School
- MEd, Harvard (Education)
Geri Landman, MD  
- Frankford Township, NJ  
- Williams (Biology and Political Science)  
- University of California San Francisco School of Medicine

Hojun Li, MD, PhD  
- Columbia, MD  
- Maryland (Biochemistry)  
- Univ of Pennsylvania School of Medicine  
- PhD (Cell and Molecular Biology)

Carolyn Marcus, MD  
- New York, NY  
- Princeton (Ecology & Evolutionary Biology)  
- Mt Sinai School of Medicine

Christa Matrone, MD  
- Spring Hill, FL  
- New College of Florida (Biology)  
- University of Florida College of Medicine

Jonathan (Jodge) Meserve, MD  
(Pediatric Anesthesia)  
- Boston, MA  
- Tufts (Mathematics & Geology)  
- Oregon University School of Medicine

Mugdha Mohanty, MBBS  
- Cuttack, India  
- Maulana Azad Medical College  
- Pediatrics Residency (3-yr) at Maulana Azad

Anne O’Donnell, MD, PhD  
(Pediatric Genetics)  
- Shreveport, LA  
- Tulane (Biological Chemistry)  
- Columbia Univ College of Physicians and Surgeons  
- PhD (Genetics)

Laura Petri, MD (Pediatric Anesthesia)  
- South Bend, IN  
- Lehigh (Biochemistry & Religion)  
- Univ of Pennsylvania School of Medicine

Brian Quinn, MD  
- Middletown, CT  
- Maine (Nursing)  
- Eastern Virginia Medical School

Seán Reynolds, MBChB  
- County Clare, Ireland  
- University College Cork College of Medicine

Michael Toce, MS, MD  
- St Louis, MO  
- Carleton (Biology & Biochemistry)  
- Medical College of Wisconsin  
- MS (Bacteriology)

Jennifer (Jena) Blumen-thal Vacarella, MD  
- Birmingham, AL  
- Wofford College (Biology)  
- University of Alabama Tuscaloosa School of Medicine

Margaret Stefater, MD, PhD  
- Gainesville, FL  
- Northwestern (Biological Sciences)  
- University of Cincinnati College of Medicine  
- PhD (Neuroscience)

Jane Whitney, MD  
- Boston, MA  
- Wellesley (Psychology & Classical Civilizations)  
- Stanford University School of Medicine
Senior Residents (Urban Health and Advocacy Track)

Emily Allen, MD
- North Haven, CT
- Swarthmore (Political Science)
- University of Connecticut School of Medicine

Christine Cheston, MD
- Oakton, VA
- Virginia (Human Biology)
- Johns Hopkins University School of Medicine

Mei Elansary, MD, MPhil
- Egypt → Vienna, VA
- Pennsylvania (Environm’l Studies & Biological Basis of Behavior)
- Yale University School of Medicine
- MPhil, Oxford University (Medical Anthropology)

Curtis Nordgaard, MSc, MD
- Princeton, MN
- St Cloud State University (Psychology)
- University of Minnesota Medical School
- MSc, McMaster (Biology & Psychology)

Andrey Ostrovsky, MD
- Owings Mills, MD
- Boston University (Psychology, Chemistry & Biology)
- Boston University School of Medicine

Alon Peitz, MD, MBA
- Israel → Beachwood, OH
- Ohio State (Operational Management)
- Vanderbilt University School of Medicine
- MBA (Business Admin)

Elliot Rabinowitz, MD
- Bedford, MA
- Haverford (Biology)
- University of Pennsylvania School of Medicine

Davida Schiff, MD
- Chicago, IL
- Columbia (Earth & Environm’l Engineering)
- Boston University School of Medicine

Jessica Schiffman, MD, MPH
- Korea → China → Atlanta, GA
- Cornell (College Scholar)
- Johns Hopkins University School of Medicine
- MPH, Harvard (Health Policy and Management)

Alla Smith, MD
- Annapolis, MD
- Bowdoin (Biology & History)
- Yale University School of Medicine

Amanda Stewart, MD
- Poway, CA
- University of California at Los Angeles (Neurosci)
- University of Pennsylvania School of Medicine
- MPH (Social and Behavioral Sciences)

Robert (Blake) Windsor, MD
- Atlanta, GA
- Georgia (Biological Engineering)
- Mercer University School of Medicine

Senior Residents (Medicine-Pediatrics Track, Year 4)

Morgan Chessia Espérance, MD
- Scituate, MA
- Brown (Neuroscience)
- Harvard Medical School

Starla Kiser, MD, MPA
- Coeburn, Virginia
- East Tennessee State (Biology & Humanities)
- Harvard Medical School
- MPA, Harvard, Kennedy School Government

Alishya Mayfield, MD
- Banff, Alberta, Canada
- University of California, Santa Barbara (Political Science)
- Albert Einstein School of Medicine

Timothy (Tim) Menza, MD, PhD
- Nanuet, NY
- Williams (Biology)
- University of Washington School of Medicine
- PhD (Epidemiology)

Ryan Schwarz, MD, MBA
- Waynesburg, PA
- Bard (Biology)
- Yale University School of Medicine
- MBA, Yale School of Management
Chief Residents (Boston Children’s Hospital)

Jessica (Jess) Kelly Creedon, MD
- Needham, MA
- Dartmouth (Psychology)
- Tufts University School of Medicine

Katherine Schlosser, MD
- Chappaqua, NY
- Stanford (Biology)
- Case Western Reserve University School of Medicine

Eric Zwemer, MD
- Chesapeake, VA
- Princeton (Psychology & Neuroscience)
- Harvard Medical School

Chief Residents (Boston Medical Center)

Katharine (Katie) Belmont Cecala, MD
- Chicago, IL
- Williams (Biology & Neuroscience)
- Washington Univ, St Louis School of Medicine

Yuen Lie (Lie) Tjoeng, MD
- St Louis, MO
- Missouri-Columbia (Biological Sciences)
- Boston University School of Medicine
Faculty Leadership
Boston Children’s Hospital

Gary R. Fleisher, MD
Physician-in-Chief and Chair of Medicine
Boston Children’s Hospital

Frederick H. Lovejoy Jr., MD
Vice Chair for Academic Affairs and Associate Physician-in-Chief

Samuel E. Lux IV, MD
Vice Chair for Research and Director of Intern Selection

Vincent W. Chiang, MD
Vice Chair for Finance

Jonathan A. Finkelstein, MD
Vice-Chair for Quality and Outcomes

Tanya S. Sharma, MD
Associate Program Director for Residency Training

Jessica K. Creeden, MD
Chief Resident

Theodore C. Sectish, MD
Vice Chair for Education and Residency Program Director

Alan M. Leichtner, MD
Vice Chair for Clinical Services

Mark A. Schuster, MD, PhD
Vice Chair for Health Policy

Thomas J. Sandora, MD
Associate Program Director for Residency Training

Ariel S. Winn, MD
Associate Program Director for Residency Training

Katherine Schlosser, MD
Chief Resident

Eric K. Zwemer, MD
Chief Resident

Divisions and Programs

Adolescent Medicine

Developmental Medicine
• ASAP (Adol Substance Abuse Prog)

Emergency Medicine
• Clinical Emergency
• Clinical Toxicology (Poison Center)
• Short Stay Program

Endocrinology
• Clinical Endocrinology
• Diabetes Program
• Neuroendocrinology

Gastroenterology and Nutrition
• Clinical Gastroenterology
• Clinical Nutrition

General Clinical Research Center
• Ctr for Amb Treatment & Clin Res

General Pediatrics
• Children’s Hospital Inpatient Service
• CHPCC (Primary Care)
• Clinical Effectiveness
• Coordinated Care Service
• Environmental Medicine
• Family Develop’t Unit (Child Abuse)
• Martha Eliot Health Center

Genetics & Genomics
• Clinical Genetics
• Metabolism
• Genomics

S. Jean Emans, MD
Leonard A. Rappaport, MD
Sharon J. Levy, MD
Richard G. Bachur, MD
Anne M. Stack, MD
Michele M. Burns, MD
Mark N. Baskin, MD
Joseph A. Majzoub, MD
Joseph I. Wolfsdorf, MB, BCh
Joseph I. Wolfsdorf, MB, BCh
Joseph A. Majzoub, MD
Wayne I. Lencer, MD
Alan M. Leichtner, MD
Christopher P. Duggan, MD, MPH
Ellis J. Neufeld, MD, PhD
Robert P. Sundel, MD
Mark A. Schuster, MD, PhD
Vincent W. Chiang, MD
Joanne E. Cox, MD
Jonathan A. Finkelstein, MD
Sanjeeva Mauskar, MBBS
Alan D. Woolf, MD, MPH
Celeste R. Wilson, MD
Alex Epee-Bounya, MD
Christopher A. Walsh, MD
Joan M. Stoler, MD
Gerard T. Berry, MD
Louis M. Kunkel, PhD

Hematology/Oncology
• Clinical Hematology
• Clinical Oncology
• Stem Cell Transplantation

Immunology
• Allergy
• Dermatology
• Immunology
• Clinical Rheumatology

Infectious Diseases
• Clinical Infectious Diseases

Interdepartmental Programs
• Bioinformatics
• Cellular and Molecular Medicine
• Stem Cell Biology

Medicine Critical Care

Molecular Medicine

Neonatology
• at Boston Children’s Hospital
• at Beth Israel Deaconess Med Ctr
• at Brigham and Women’s Hospital

Nephrology
• Clinical Nephrology

Pulmonary Medicine
• Clinical Pulmonology
• Ina Sue Perlmutter Laboratory

David A. Williams, MD
Matthew M. Heeney, MD
Lisa R. Diller, MD
George Q. Daley, MD, PhD
Raif S. Geha, MD
Hans C. Oettgen, MD, PhD
Stephen E. Gellis, MD
Hans C. Oettgen, MD, PhD
Robert P. Sundel, MD
Michael Wessels, MD
Sandra K. Burchett, MD
Isaac Kohane, MD
Frederick W. Alt, PhD
Leonard I. Zon, MD
Michael S. D. Agus, MD
Stephen C. Harrison, PhD
Stella Kourambanis, MD
Anne R. Hansen, MD
DeWayne M. Pursley, MD
Terrie E. Inder, MD, MB ChB

Friedhelm Hildebrandt, MD
Michael J. Somers, MD
Craig J. Gerard, MD, PhD
Henry L. Dorkin, MD
Craig J. Gerard, MD, PhD
# Faculty Leadership

**Boston Medical Center**

**Robert J. Vinci, MD**  
Chief of Pediatrics, Boston Medical Center  
Chair, Department of Pediatrics, Boston University School of Medicine

**Catherine L. Distler, MD**  
Associate Program Director

**Katherine B. Cecala, MD**  
Chief Resident

**Daniel J. Schumacher, MD**  
Associate Program Director

**Yuen Lie Tjoeng, MD**  
Chief Resident

## Divisions and Programs

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<th>Jose Alberto Betances, MD</th>
<th>Suleiman Mustafa-Kutana, MD</th>
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<td>Christina Nordt, MD, MPH</td>
<td>Angelina Bernier, MD</td>
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<td>Seeta Badrinath, MD</td>
<td>Claudio Morera, MD</td>
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<td>Sean Palfrey, MD</td>
<td>Michael Silverstein, MD</td>
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<td>Jose Alberto Betances, MD</td>
<td>Megan Bair-Merritt, MD, MSCE</td>
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<td>Heather Walter, MD, MPH.</td>
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<td>Sharon O’Brien, MD</td>
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<td>Philippa Sprintz, MD</td>
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<td>Maxine Weinreb EdD</td>
<td>William Debassio, MD, Ph.D</td>
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<td>Marilyn Augustyn, MD</td>
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<td>Stephanie Blerner, MD</td>
<td>Robyn Cohen, MD, MPH</td>
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| David H. Dorfman, MD |  |
| Tehnaz P. Boyle, MD, PhD |  |

| Endocrinology |  |
| Gastroenterology and Nutrition |  |
| General Pediatrics |  |
| • Academic Fellowship |  |
| • HIV Primary Care |  |
| • Medical Student Teaching |  |

| Genetics |  |
| Health Leads |  |
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| • HIV Program |  |
| • Refugee Health |  |

| Neurology |  |
| Neurosurgery |  |
| Ophthalmology |  |
| Orthopedics |  |
| Otolaryngology |  |
| Pediatric Allergy |  |
| Pediatric Surgery |  |
| Pediatrics Weight Management Prog |  |
| Pulmonary Medicine |  |
Facilities

Statistics
- 395 beds (~50% medical)
  - 29 bed multidisciplinary ICU
  - 29 bed cardiac ICU
  - 24 bed neonatal ICU
  - 12 bed medicine ICU
  - 10 bed intermediate care ICU
  - 13 bed stem cell transplantation unit
  - 6 bed clinical research center
- 25,000 inpatient admissions
- 26,500 surgical procedures
  - 1,600 cardiac cath procedures
- 557,000 outpatient visits
  - 225 specialized clinical programs
  - 62,000 emergency department visits
- 1,100 medical and dental staff
- 2,100 nurses
- 34 languages spoken by patients

Boston Children's Hospital

Boston Children's Hospital is one of the largest pediatric hospitals in the United States, and a major teaching facility of Harvard Medical School. Founded in 1869 as a 20-bed hospital for children, it is now a comprehensive medical center for pediatric and adolescent health care, dedicated to excellence in patient care, teaching and research.

There are 396 inpatient beds distributed on five floors in the Main hospital building, Main South, and the new state-of-the-art Mandell building. The hospital contains a 29-bed multidisciplinary intensive care unit, 12-bed medical intensive care unit, 24-bed neonatal intensive care unit, 26-bed cardiac intensive care unit, 10-bed intermediate care unit, 13-bed bone marrow transplantation unit, and six-bed clinical research center. Children's has physician services agreements for inpatient pediatrics, emergency medicine and newborn medicine at Winchester Hospital, Beverly Hospital, Milford Hospital, Norwood Hospital, St Luke's Hospital, and South Shore Hospital. In addition, Children's helps manage the newborn services at Good Samaritan, Holy Family and St Elizabeth's Hospitals, and a subset of subspecialty services at Dartmouth-Hitchcock Hospital in Manchester, NH.

There are more than 100 outpatient programs ranging from primary care to a wide variety of specialty programs. Outpatient facilities include an 11-story building for ambulatory services, the Adolescent/Young Adult Program, Children's Hospital Primary Care Center, and Martha Eliot Health Center, an affiliated neighborhood health center. In addition, outpatient services are provided at Children's satellite centers in North Dartmouth, Lexington, Peabody and Waltham Mass., as well as through affiliations with Beverly Hospital, South Shore Hospital, Winchester Hospital, and hospitals in the Caritas Christi system, including Holy Family, Good Samaritan, Norwood and St. Elizabeth’s.

Hunnewell Building

This famous "green-domed" building with its classic columned facade on Longwood Ave was built in 1914 and is the oldest building in the Children's complex. To many it is the symbol of the institution. Today, it mostly houses administrative offices, including the Dept. of Medicine, offices, which are located on the 2nd floor. The copper dome covers an internal atrium. It was re-clad about 20 years ago and is only beginning to recover its verdigris hue.
Main South
Children's opened this 11-story clinical building in 2005. An extension of the hospital’s existing Main Building, Main South gives clinicians access to cutting-edge technology while carving out more room for patients and families. The building includes cardiac, medical and multidisciplinary ICU beds, a medical intermediate care unit, a cardiac catheterization lab, inpatient echocardiography, medical and surgical patient beds, operating rooms, interventional radiology space and administrative office space.

Mandell Building
This 10-story state-of-the-art clinical building opened in 2013. It contains much needed expansion space for the Emergency, Radiology, Surgery, Neurology, and Pharmacy services. There are four floors of single bed inpatient rooms that align with floors in the existing hospital, new ‘short stay beds’, and a neuroimaging suite with additional MRI, magnetoencephalography, functional MRI, and near infrared imaging tools.

Fegan Building
This 12 story building sits in the middle of the Children’s campus, between the Hunnewell building and the Main Hospital, and houses Children’s ambulatory programs and many clinician’s offices.

Library
The library is a beautiful building that lies next to the Prouty Garden and was designed to blend into its surroundings. Besides the usual books and journals, the building contains a reading space overlooking the garden stocked with daily newspapers, private study carrels, and the Gamble Room—a recreation of a century-old, cherry
paneled doctor’s study, including a marble trimmed, bluestone hearth fireplace.

Prouty Garden
The Prouty Memorial Garden is nestled between the Wolbach and Farley buildings and the Library. It is a quiet and colorful oasis at the heart of the hospital. Designed by the famous Olmstead landscape architects, it is modeled after the terrace and garden at the Museum of Modern Art in New York City and is filled with specimen plants and trees surrounding a grassy lawn and fountain. The garden provides a respite on a hectic day. A stone patio with tables and umbrellas extends into the garden and is a great place to have lunch, or coffee after rounds. The garden is also a wonderful spot for children and their families to enjoy the outdoors on a nice day.

Enders and Karp Research Laboratories
The 13-story John F. Enders Laboratories for Pediatric Research, named for the Nobel Prize recipient who cultured the polio and measles viruses; the 12-story state-of-the-art Karp Family Research Laboratories; and a portion of the new neighboring Center for Life Science Boston, add up to more than 755,000 square feet of research space. These buildings contain basic scientists and physician investigators in virtually every specialty. The hospital faculty includes 6 members of the National Academy of Sciences, 12 members of the Academy’s Institute of Medicine, 15 Fellows of the American Academy of Arts and Sciences, 13 members of the Howard Hughes Medical Institute and a level of research that rivals the very best research institutes in the world. Funding for research at Boston Children’s Hospital totals approximately $225 million and exceeds all other pediatric hospitals in the United States.

Boston Children’s Hospital is also a leader in clinical research and has recently doubled clinical research space with the acquisition of a new building near the hospital. The clinical research program has extensive support services, including biostatisticians, epidemiologists, database programmers, data coordinators and clinical research coordinators who provide consultation to clinical investigators. The hospital also has one of the oldest and largest NIH-funded Clinical Research Centers in the country.
Boston Children’s Hospital is the primary pediatric program of Harvard Medical School, which is located next to the hospital. All faculty hold academic appointments at the medical school. There are more than 3000 Harvard Medical School faculty affiliated with Boston Children’s Hospital.

Children’s Hospital and Harvard Medical School are part of a larger, roughly 20 square block campus called the Longwood Medical Area. Children’s sits in the center of this area, next to the Brigham and Women’s Hospital, Beth Israel Deaconess Medical Center and the Dana-Farber Cancer Institute, as well as Harvard Medical School, and within a block of the Joslin Diabetes Center, the Massachusetts College of Pharmacy, the Harvard School of Public Health, and the Harvard School of Dental Medicine. Some members of the staff are also staff members at one of these neighboring institutions.

Boston Children’s Hospital participates in numerous cooperative programs. It is a partner in Neonatology with Brigham and Women’s Hospital and Beth Israel Deaconess Medical Center. It is the headquarters of the New England Regional Infant Cardiac Program, the site of the Massachusetts Poison Control System, a partner in the Dana-Farber/Boston Children’s Cancer and Blood Disorders Center with Dana-Farber Cancer Institute and a partner in the Joint Program in Gastroenterology and Nutrition with Massachusetts General Hospital across town. Several surgical departments are joint programs with the Brigham and Women’s Hospital.

In 2009, the Immune Disease Institute, which is partly located in the Harvard Medical School buildings, joined with Children’s Hospital to become the Program in Cellular and Molecular Medicine. The PCMM, which originated at Children’s Hospital years ago as the Blood Grouping Laboratory, is, in a sense, coming home. The Program has 16 principal investigators and 200 staff who pursue basic research in four principal areas: adhesion molecules and inflammation, autoimmune and allergic disease, genetics of immunodeficiency and cancer, and immune defenses against infectious disease and tumors.
In July 1996, Boston City Hospital, Boston Specialty and Rehabilitation Hospital, and Boston University Medical Center merged to form Boston Medical Center (BMC). Through its partnership with Boston University School of Medicine and Boston Health Net neighborhood health centers, BMC continues the mission set forth by Boston City Hospital more than 125 years ago—to provide medical care to the residents of Boston. Last year, the Department of Pediatrics at BMC provided care to more than 3,000 pediatric inpatients, 50,000 outpatients, and 29,000 patients in the emergency department. The neighborhood health centers, which provide continuity clinic sites for house officer training, contribute an additional 110,000 ambulatory visits each year to the program. Boston Health Net reflects our commitment to Community Care by combining BMC with 15 community based health centers into an integrated service delivery network.

**Inpatient Facility**

This building opened in January 1994. There is a 36-bed pediatric unit, a six-bed pediatric intensive care unit, an 18-bed level III neonatal intensive care unit and a 25-bed normal newborn nursery. There are approximately 2,400 deliveries each year, 40 percent of which are high risk. There are 25 outpatient programs including primary care, adolescent and a variety of specialty programs, many of which are directed towards health care issues of urban children due to poverty.

**Maxwell Finland Laboratory**

The Maxwell Finland Laboratory for Infectious Diseases, named for the world-renowned investigator of bacterial diseases and antibiotics, houses the laboratories of the divisions of pediatric infectious diseases, immunology, pulmonary, and molecular biology. Research in these laboratories focuses on problems of urban children.

**Shapiro Ambulatory Care Building**

In April 2011 BMC hosted the grand opening of the Carl J. and Ruth Shapiro Ambulatory Care Center, the hospital’s new state-of-the-art facility for outpatient services. The 250,000 square foot, nine-story building allows consolidation of clinical programs and a standard of care delivery that maximizes patient comfort and operation efficiency.
Yawkey Ambulatory Care Center

Home to all Ambulatory Care Programs at BMC, the Pediatric Department Programs are located on the fifth floor of the Yawkey Ambulatory Care Center Building. Residents who select BMC as their continuity practice site will be based here at BMC. The Department of Pediatrics provides extensive services to its patients in this ambulatory site, including a food pantry, clinic-based literacy program (Reach Out and Read) and specialized Health Services screening for our patients and their families (Project Health Help Desk).

Isadore Talbot Building

The Talbot Building demonstrates the beautiful architecture of turn-of-the-century Boston. It was the original site of the Massachusetts Memorial Hospital (predecessor to BMC) and is now renovated on the BMC campus and is the site of the Boston University School of Public Health.

Moakley Cancer Care Building

With the November 2006 opening of the Moakley Building, Boston Medical Center had reached its goal of providing a best-in-class, centralized cancer and ambulatory care facility that embodied the commitment to provide exceptional care, without exception. Named in honor of the late Congressman John Joseph Moakley, a devoted champion of BMC, the building was designed to streamline care by consolidating the diagnostic and cancer treatments that were scattered across the 16-square-block Medical Campus. The latest equipment and technology supplement the services offered, including the diagnosis and treatment of cancer and digestive and otolaryngology disorders, a breast health center, and an ambulatory surgery center.
Boston University School of Medicine

Boston University School of Medicine (BUSM) is located in the historic South End of Boston and shares a campus with Boston Medical Center Hospital, the School of Public Health, the Goldman School of Dental Medicine, the Solomon Carter Fuller Mental Health Center, and the Boston Public Health Commission. This campus hosts approximately 700 medical students, along with 550 School of Public Health students, and 500 graduate students receiving master’s and doctorates, BUSM has more than 3,000 full-time and part-time faculty members. Besides the 4-year MD program, there are a number of dual degree options and students may earn a combined MD/PhD, MD/MPH, or MD/MBA.

Boston University School of Medicine began as the New England Female Medical College, which opened in 1848 as the first institution in the world to offer medical education to women. In 1873, the college merged with Boston University, becoming the first coeducational medical school. Throughout its history BUSM has maintained a strong commitment to the study and practice of medicine in the context of a mission of service to society. In addition, BUSM is a major research institution with over 600 funded research programs and more than 1,000 active clinical trials, providing an exceptional environment for students interested in basic science, clinical investigation, or public health and health services oriented research. Students may also participate in international health programs and a variety of professional and social service activities.

BUSM is distinguished by its programs in cardiovascular diseases, cancer, pulmonary disease, human genetics, dermatology, arthritis, geriatrics, Alzheimer’s disease, Parkinson’s disease, public health, law and medicine, and medical ethics, among others. Boston University School of Medicine continues to provide the leadership for the Framingham Heart Study, the largest epidemiological study in the world. As a leading medical research institution BUSM is ranked 40th in receipt of federal funding. In 2009, the Medical Campus received $329 million in awards. Of this, the BUSM received $156 million, the School of Dental Medicine $14 million, and the School of Public Health $32 million. Research awards to the BU-affiliated Boston Medical Center (BMC), where many of the faculty’s research grants are awarded and administered, totaled $127 million. The school, in partnership with Boston Medical Center, continues to build BioSquare, a 16-acre state-of-the-art biomedical research and business park, next to its campus in the South End. BioSquare provides BUSM with an additional 2.5 million square feet of research space. There is a particular emphasis on interdisciplinary research programs featuring investigators from the School of Medicine collaborating with investigators at the other medical campus schools (Public Health and Dentistry), our principle teaching hospital (Boston Medical Center), and the Charles River Campus of Boston University. These collaborative projects often focus on urban health problems, health disparities, and issues of health care delivery to vulnerable populations and underserved communities.
The Boston Combined Residency Program in Pediatrics (BCRP) was formed to meet the needs of the future, bringing together the training programs of Boston Medical Center (formerly Boston City Hospital) and Boston Children’s Hospital. Boston Medical Center has a long and important history of clinical research, advocacy, public policy and primary care training for pediatricians in an urban setting. Boston Children’s Hospital is the nation’s leading research and training institution dedicated to the care of children, adolescents, and young adults with unusual and complex medical problems.

Pediatric care is changing rapidly and the dynamic interface between health care systems, and complex medical challenges requires residency training programs to constantly modify our educational programs. Pediatricians of the future will need advanced knowledge and skills to diagnose and treat children with medical and surgical problems in a primary care setting. Subspecialists will work in close collaboration with primary care clinicians in managing children who require their expertise. Imbedded within this framework of pediatric care must be the continued development of leaders in academic medicine and research.

The goal of the BCRP is to provide our housestaff with the skills required to attain leadership positions in academic pediatrics, to support their clinical and research careers, thus allowing them to modify the future direction of pediatric health care. You will receive comprehensive training experiences that emphasize outstanding clinical care, while integrating your training with advances in basic science, and provide you with access to faculty who are leaders in science, clinical care, global health, advocacy and public policy. The BCRP is committed to providing you with a dynamic training experience while emphasizing humanistic qualities in a supportive training environment to assist you in reaching your professional and personal goals.

We believe the BCRP serves as a national model for pediatric training and comprehensive care for children. It has brought together two great hospitals and universities not for economic gain, but rather to help craft the future of pediatric care and training. We are pleased to offer this program for applicants interested in becoming leaders in pediatrics, and we look forward to working with you as our colleagues to meet the challenges of pediatric health care and to help shape the future of clinical care, research, and education.

Tracks
The Boston Combined Residency Program in Pediatrics (BCRP) at Boston Children’s Hospital and Boston Medical Center emphasizes training in general pediatrics for all residents, regardless of their ultimate career plans. The program offers two tracks:

- Categorical Track (31 residents) — emphasizing training in academic medicine and pediatric subspecialties
- Urban Health and Advocacy Track (11 residents) — emphasizing training in urban pediatrics, public policy and advocacy

Categorical Track
This track (NRMP #1259320C0) is designed for applicants who wish to focus on academic general or specialty pediatrics. Besides the strong educational base in general and subspecialty pediatrics, principles of academic leadership are actively taught throughout the three-year training program. About 85% of the Categorical track
graduates enter subspecialty fellowships or academic general pediatrics fellowships, but some pursue pediatric practice, hospitalist positions, global health and health policy experiences, and health services research training programs.

Categorical track residents have opportunities for research funding, exposure to academic meetings and active mentoring by general pediatrics and subspecialty faculty. Most residents participate in the standard three-year curriculum; however, the two research tracks of the American Board of Pediatrics—the Integrated Research Pathway, and the Accelerated Research Pathway—are available to housestaff pursuing academic research careers. In fact, the BCRP has had the most residents participate in these so-called “fast-tracking” pathways of any program.

Categorical residents do approximately 70 percent of their training at Children’s Hospital and 30 percent of their training at Boston Medical Center.

**Urban Health and Advocacy Track**

This track (NRMP #1259320C1) was previously called the Primary Care Track but has been renamed to more accurately reflect its mission. It provides general pediatric training with an emphasis on experiences in the primary care of underserved children and their parents in an urban setting. This track allows residents to focus on their interests in general academic pediatrics, public health policy, advocacy, community pediatrics, and global health. Development of leaders in these areas is a goal of this track. Beginning in the PL2 year, Urban Health and Advocacy Track (UHAT) residents select an additional half-day experience to augment their training. Residents have the option of choosing between a second continuity clinic and a project in urban health, advocacy, global health or public policy. Those selecting a project are coupled with a faculty mentor throughout the PL2 and PL3 years. The UHAT curriculum is enhanced by monthly educational sessions on child health and advocacy, as well as by regularly scheduled evening seminars on health policy. Over the past two years these sessions have been augmented by the development of UHAT specific mentoring groups, which, under the direction of faculty leaders, provide an introduction in careers in global health, health services and health policy.

Many UHAT graduates have careers in academic medicine with a focus on health care issues of the urban poor, serving as researchers, advocates, community leaders and clinicians. They often practice in urban settings, and many pursue academic general pediatric fellowships, advocacy fellowships, masters programs in public health and health services research fellowships.

UHAT residents spend 40 percent of their time at Boston Medical Center and 60 percent at Children’s Hospital. Inpatient general pediatrics rotations are spent primarily at Boston Medical Center in the PL-2 and PL-3 years.

**Common Aspects**

Both tracks are geared towards training outstanding general pediatricians. Rotations in the two tracks are very similar and all residents work at both institutions, but the faculties at Children’s Hospital and Boston Medical Center have different interests and the two institutions have a different focus, which allows residents to focus upon their individual goals and take advantage of the diverse resources to explore and prepare for careers in virtually any aspect of pediatrics.

It is important to emphasize that residents in the two tracks are all part of the same program and function as one. They are totally integrated in all aspects of the program and, aside from the program leaders, few faculty or staff know which residents belong to which track.
As described in detail in the Application section, each track has a separate match number through the National Resident Matching Program (NRMP) and has a separate selection process. Applicants can apply to either one or both tracks. Because the tracks are quite similar and the program is highly unified and, because most applicant’s interests overlap the missions of each track to some degree, most applicants should apply to both tracks.

**Combined Pediatrics-Anesthesia**

The BCRP was one of the first residency programs to offer combined training in Pediatrics and Anesthesia (NRMP #1259726C0). Residents spend their first year in pediatrics residency. The following year is the first year of anesthesia training, followed by three years of integrated residency training in both pediatrics and anesthesia. Throughout the three years of integrated training, while residents are doing core training in Pediatrics or Anesthesia, they attend conferences and participate in core clinical activities once a month in the other discipline to keep the combined program fully integrated.

Individuals ideally suited for this combined training will likely pursue careers at the interface between critical care, pediatrics, and anesthesiology. Examples of such careers include hospitalist medicine, pain and palliative care, out-of operating room procedural and sedations services, and members of integrated subspecialty teams in pediatrics, critical care and anesthesiology.

**Combined Pediatrics-Medical Genetics**

The BCRP offers combined training in Pediatrics and Medical Genetics (NRMP #7652444017) starting with a complete year of pediatrics residency in year one and integrated training for the remaining four years, including a year of research.

**Combined Pediatrics-Child Neurology**

The BCRP offers two different Pediatrics-Child Neurology programs: one a joint program between the Categorical Track and the Child Neurology program at Boston Children’s Hospital (NRMP #1259185C0), and one between the Urban Health and Advocacy Track and the Child Neurology program at Boston Medical Center (NRMP #1257185C0). These two “Categorical” programs both begin with 2 years of general pediatrics in the appropriate track of the BCRP followed by three years of child neurology at either Boston Children’s Hospital or the Boston Medical Center, depending on the program. Both child neurology programs also offer separate “Advanced” positions that are not linked to the BCRP, where the matched residents first complete their 2 years of general pediatrics in some other program.

**Neurodevelopmental Disabilities Preliminary Position**

The BCRP offers one two-year Preliminary-NDD position (NRMP #1259320P1) to those who match in the Boston Children’s Hospital Neurodevelopmental Disabilities (NDD) training program (NRMP #1259186A0). NDD is an ACGME-accredited program combining 2-years of pediatric training with 4-years of training in adult and pediatric neurology, adult and pediatric NDD, and basic and clinical sciences. Children’s Hospital only offers an Advanced four-year NDD position, which begins in 2017. However, the linked BCRP Preliminary position allows applicants to complete their entire six-year NDD training in Boston.

**Harvard BWH/BCH Med-Peds Residency**

The Harvard Associated Medicine & Pediatrics Programs were established in the late 1980s. The highly competitive program at the Brigham and Women’s Hospital and Children’s Hospital is fully integrated into each categorical residency. Med-Peds residents have the same supervision, responsibilities and opportunities as their medicine and pediatrics colleagues and are a vital part of the BCRP. More information about the Harvard BWH/BCH Med-Peds Program is available [here](#).

**Residency Program Organization**

The Residency Program Training Committee (RPTC) was established in the 1970s. It is the BCRP Program Evaluation Committee and is responsible for for review of the curriculum and for development of new training initiatives. The committee’s structure, shown in the figure, aligns residents and faculty members with the main educational elements of the residency program curriculum. The RPTC Executive Committee oversees and integrates the work of five standing Committees for Inpatient Care, Subspecialty Experiences, Intensive Care, Ambulatory Experiences, and the Individualized Curriculum. On all committees of the RPTC, there are faculty representatives from each institution, but residents elected from each class constitute the majority of the committee members. The fact that residents in the Boston Combined Residency Program (BCRP) are primarily responsible for directing their own program and deciding critical details is one of the strengths of the program.

Based on new 2013 ACGME Program Requirements for Graduate Medical Education in Pediatrics the RPTC and its standing Committees redesigned the residency program curriculum while maintaining compliance with new program requirements. Our aim was to create an
innovative curriculum that provided rigorous pediatric training, met curricular needs, and provided flexibility for professional development. We believe the new BCRP curriculum reflects the mission, vision, and values of our program and enhances the academic focus of residents, a focus that sets us apart as a pediatric residency program nationally.

**BCRP Administration and Operations**

The BCRP is the union of prior residency programs at Boston Children's Hospital (BCH) and Boston Medical Center (BMC) and functions as a one integrated program with the leadership at each institution working collaboratively. At each site there are weekly meetings of the program leaders (program directors, chief residents, administrative staff, and, when appropriate, department chairs). The Executive Committee is comprised of all program leaders and meets monthly and alternates sites.

Regular class meetings every few months allow for exchange of ideas, information, and areas of needed improvement. Town meetings of the entire residency serve a similar function and occur every two to three months. These gatherings provide an open forum for discussion on a variety of topics related to residency education.

Progress Notes, a weekly newsletter, written by the chief residents, features a column, Program Directors’ Corner, in which the leadership provides an opportunity for real time discussion of events, ideas for curricular change, areas of success to celebrate, or areas of improvement that need action.

In these multiples venues, we hope to continue to foster bidirectional exchange of information, ideas, and issues with the ultimate goal of constantly improving the education and training within the BCRP.

Residents serve as a driving force for change in the program. They play a key role in the Residency Program Training Committee and the resident voice at class meetings and town meetings is pivotal to curricular development. The wonderful collaboration of residents with chief residents and program leadership is a significant feature of the BCRP.

**The 2014-2015 BCRP Program**

The re-designed residency program is the culmination of the efforts of residents and faculty on the five Committees of the Residency Program Training Committee over the past two years. Consistent with the program’s mission, vision, and values, the new BCRP Curriculum features these key elements to produce future leaders in American Pediatrics:

- **The Quarter System:** Partitioning of ambulatory and inpatient time in Intern Year, featuring the Keystone Quarter, which integrates Developmental and Behavioral Pediatrics with Ambulatory Pediatrics and Child Advocacy, Emergency Medicine, and Longitudinal Ambulatory Experiences.
• Enhanced ambulatory training experiences in general and subspecialty pediatrics
• New Inpatient Subspecialty Teams
  ▸ Hematology – Allergy – Immunology – Rheumatology (HAIR)
  ▸ Pulmonary – Endocrinology – Adolescent – Renal (PEAR).
• Longitudinal Subspecialty Experiences – learning the art of diagnosis and disease management
• Creation of the BCRP Academies: Innovative, academic homes

The Quarter System: Partitioning of Ambulatory and Inpatient Time in Intern Year

In Intern Year, the Keystone Quarter provides an integrated 12-week block that serves as a foundational experience in ambulatory pediatrics, child advocacy, developmental and behavioral pediatrics, emergency medicine, and longitudinal ambulatory experiences. The Quarter System facilitates an integrated approach to didactic instruction via two weekly Keystone Quarter Seminar Series for the 10-11 residents assigned to the block. One series of seminars is devoted to child advocacy and the other to developmental and behavioral pediatrics and primary care. Residents flow through the Intern Year schedule in a pattern of 12 weeks of inpatient rotations alternating with 12 weeks of ambulatory training. Apart from the Keystone Quarter, the other three Quarters (one ambulatory-focused and two inpatient-focused) feature more traditional 4-week block experiences clustered within each 12-week block:
• Adolescent Medicine – Newborn Medicine – Night Ward Team and Vacation
• General Pediatrics Inpatient Wards
  ▸ BMC Wards,
  ▸ BCH 9E, BCH 7W (PEAR), BCH 6E (HAIR)
  ▸ BCH Short Stay Unit
• BWH and BMC Neonatal Intensive Care Units and BCH Intermediate Care Program (a step-up unit)

Overall, the adoption of the Quarter System increases the amount of ambulatory training time in the Intern Year compared to traditional pediatric training models. We believe this approach provides a strong foundation in general pediatrics, greater opportunities for longitudinal care, and a comprehensive understanding of community resources.

Enhanced Ambulatory Training Experiences in General and Subspecialty Pediatrics

In addition to the enhancements to ambulatory training experiences in general pediatrics as introduced by the Keystone Quarter, we made significant improvements in the amount of ambulatory training time within our PL-2 pediatric subspecialty rotations. Each of the following subspecialty rotations anchored on inpatient specialty units now integrates ambulatory subspecialty clinic time for approximately 20-25% of the 4-week block rotation:
• Cardiology
• Gastroenterology
• Oncology
• Pulmonary Medicine

In addition, interns on 7W PEAR team attend clinics in endocrinology and nephrology and interns on 9E attend allergy-immunology and infectious diseases clinics to provide an exposure to the outpatient focus of these subspecialties. Junior residents on the 6E HAIR team split their time between leading the inpatient team and having outpatient opportunities in hematology and rheumatology clinics.

Our program’s aim is to equip our residents with the knowledge and skills of a general pediatrician who knows how to evaluate and treat the most common problems referred to pediatric subspecialists. This integrated approach facilitates an understanding of both the breadth and depth of pediatric subspecialty care.

New Inpatient Subspecialty Teams: Hematology – Allergy – Immunology – Rheumatology and Pulmonary – Endocrinology – Adolescent – Renal

In an effort to create more educational and clinically effective inpatient ward teams, last year we created a new team and grouped complementary subspecialty services together. The new inpatient team with its home base on 6E is the ‘HAIR’ Team consisting of the Hematology, Allergy, Immunology, and Rheumatology services. As a result, the remaining subspecialty services based on 7W form a smaller team with fewer subspecialties, named the ‘PEAR’ Team. That team consists of the Pulmonary
Medicine, Endocrinology, Adolescent Medicine, and Renal services. These smaller teams will provide additional Junior Resident Supervisory Experiences and new opportunities to attend ambulatory subspecialty clinics. As described in the section above, these smaller teams include outpatient time in subspecialty clinics to broaden the subspecialty experience with a focus on the common referrals to the subspecialties from general pediatricians.

**Longitudinal Subspecialty Experiences – Learning the Art of Diagnosis and Disease Management**

In 2012-13, we piloted the option of substituting pediatric subspecialty clinics for general pediatric clinics during the PL-3 Year. We continue to offer this option for Senior Residents, allowing residents with a known interest in a particular subspecialty to focus their Longitudinal Ambulatory Experience on that subspecialty.

In addition, last year we piloted a longitudinal subspecialty experience for Interns and Juniors who match to the Categorical Track. Six categorical residents from the PL-1 and PL-2 years participate in an ambulatory subspecialty experience that consists of 16 half days throughout the year in a single ambulatory subspecialty program. The goals are: 1) to develop diagnostic and management skills for common acute and chronic problems that present to pediatric subspecialists, 2) to develop skills in subspecialty consultation, and 3) to understand the interface between primary care providers and subspecialists.

**Creation of the BCRP Academies: Innovative Academic Homes**

The BCRP has a long history of producing academic pediatricians. With new program requirements that include six months of individualized curriculum for each resident, we identified the need for academic homes consisting of residents, faculty and other trainees who share intellectual interests. We created four BCRP Academies consistent with the interests and intellectual pursuits of our trainees and our faculty:

- Academy of Investigation
- Academy of Clinical Innovation
- Academy of Education
- Academy of Community and Global Societies

The overarching goals of the BCRP Academies are to:

- Promote formal and informal faculty-resident interactions
- Promote the concept of “interest groups” within Academies
- Develop an inventory of Academy-specific activities
- Develop Academy-specific concrete skills such as grant writing and participating on project teams

Faculty within the BCRP Academies are motivated individuals who endeavor to develop collegial relationships with BCRP residents and provide them with opportunities for advising, professional development, career guidance, and mentoring. Each resident has 6 months of Individualized Curriculum built on the foundation of our longstanding and unique PL3 rotation, the Academic Development Block (ADB). This 3-month block provides each BCRP resident with the opportunity to do a scholarly project. Mentoring residents about their Individualized Curricula (ADB coupled with other clinical experiences) is one focus of the Academies’ activities.

Academy activities begin during Intern Orientation with scheduled time throughout the year. Interns select an Academy at the beginning of the year. Residents participate in a variety of Academy-related functions and events:

- Intern Orientation – Introduction to the Academies
- Noon Conferences and Journal Clubs
- Afternoon workshops and seminars six times per year
- Evening events such as an Interest Group or Data Blitz Session about twice per year
- Individual mentoring by Academy leaders and faculty
- Academy-led retreats

The Academies are becoming the professional development homes within our training program. They serve the individual needs of our trainees as they launch their academic careers.

**Other Program Features**

**Geographic Ward Team Structure and Family Centered Rounds**

Several years ago, the BCRP created multiple geographic (unit-based) ward teams to improve patient care, optimize communication with the nursing staff, and enhance efficiency of team function. Subsequently, we implemented family centered rounds on our general
The aim of this change was to increase time at the bedside, to empower interns with greater ownership of their patients and direct communication with patients and families on rounds, and to create a more efficient team structure. To facilitate this change in rounds format, we split our traditional four-intern teams (with one Senior and an Associate Senior) into two teams, each with its own Senior. The two projects have been a success and have improved nurse-resident communication (Gordon MB. Arch Pediatr Adolesc Med 2011; 165:424-428).

The I-PASS Handoff Curriculum

As part of our aim to improve communication and patient safety (reduction in medical errors), we piloted and implemented a standardized approach to resident handoffs on the inpatient units with the introduction of the I-PASS handoff process. We employ a standard language for our verbal handoffs to focus the discussion at evening sign-out. Using our EMR, we developed an electronic handoff tool that imports medical information automatically and residents update text fields within the electronic handoff tool to provide timely information about:

- Illness severity
- Patient summary
- Action lists
- Situation awareness and contingency planning
- Synthesis by receiver

This curriculum is evidence-based and ensures a shared mental model for the care of patients on the team. The pilot study demonstrated a 40% reduction in medical errors, a decrease of time at the computer (roughly 30 minutes per day), and increased time at the bedside (30 minutes per resident per day). On the basis of these results, we are implementing the I-PASS handoff process across our program. More information about the I-PASS study and the educational curriculum is available at www.ipasshandoffstudy.com, and in several publications: Sectish TC. Pediatrics 2010;126:619-622, Starmer AJ. Pediatrics 2012;129:201-204, and O’Toole JK. J Peds 2013;162: 887-888, and Starmer AJ. JAMA 2013;310:2262-2270 (Featured article in the annual JAMA Medical Education Issue).

We continue to emphasize educational scholarship in our program and study the impacts of curricular change.

Special Class-wide and Residency-wide Educational Events

Intern Orientation

The BCRP features an intensive orientation process with the specific intention of better preparing interns for the first day of internship. Besides the traditional information sessions, we deliver simulation exercises to enhance the function of interns in their inpatient rotations, and provide modules and clear guidelines about written documentation, oral presentations, procedures, the I-PASS handoff curriculum, and on-call expectations. We also orient new interns to the information systems and have them gain competence in writing orders, viewing medical information, laboratory results and images, and in navigating the electronic health record systems.

Retreats

There are two residency-wide retreats held in the fall and late winter in which we address a variety of topics that are part of the basic culture or values of the residency program. In the past, we addressed themes such as teaching, leadership, feedback, work-life balance, patient centered care, communication skills, the I-PASS handoff curriculum, and skills training. It is an opportunity for all residents to spend a day together to reflect on the topics and have a welcome break from the day-to-day grind of residency.

Residents have provided the program with enormous feedback during these retreats which drives curricular innovation, renovation and, at times, transformational change for the BCRP.

Rising Class Orientations

In the late spring, we host class-wide orientation for Rising Juniors and Rising Seniors, in which we focus on new aspects of the curriculum, leadership skills, and personal and professional development.

Flexibility: A BCRP Value

The size of the program affords opportunities for residents to personalize their training experience. Many residents have unique educational and career objectives, and the BCRP makes every effort to adapt the standard schedule to accommodate these whenever possible.

Here are some of the ways our residents have used this flexibility:

- Attending national meetings related to pediatrics, pediatric subspecialties, and other areas of interest, and presenting work at these meetings
- Serving on national committees (AAP, AMA, etc)
- Pursuing international research and clinical experiences
- Taking advantage of unique elective experiences, like working for the Medical Unit of ABC News
• Participating in one of the ABP-approved research tracks (Integrated Research Pathway or Accelerated Research Pathway)
• Taking a year off to pursue other training or research
• Focusing on career-specific or subspecialty experiences in the senior year

Finally, size allows for flexibility with family issues, including maternity and paternity leave, leaves for illness or family emergencies, and occasionally for part-time schedules (for personal or academic reasons).

Rotations: A Year-by-Year Snapshot

Overview
The BCRP curriculum is designed to provide increased responsibility during the first two years, culminating in a strong supervisory year. All rotations occur at either Boston Children’s Hospital or Boston Medical Center. Residents are not asked to staff other hospitals during their training period. The intern year focuses on building a foundation in general pediatrics, beginning to build a longitudinal ambulatory practice, and gaining experience in advocacy. The junior year introduces rotations on subspecialty and acute care units, experiences that are often more challenging than those in the intern year and more suited to the enhanced capabilities of junior residents. Junior residents also acquire some supervisory experience and have time to individualize their curriculum. Notably, junior residents are introduced to multiple new learning experiences and are not asked to replicate intern rotations. The senior year focuses on supervisory experiences, individualized learning opportunities and research.

First Year, PL-1
The intern year experiences are intended to foster the development of a foundation of pediatric knowledge, along with the practical skills and confidence needed to work independently and supervise other residents in the subsequent years of the residency.

Interns take front-line responsibility for the care of patients in the inpatient wards, ambulatory clinics, and emergency departments at both BCH and BMC, as well as in the NICUs at BMC and Brigham and Women’s Hospital (BWH). In these settings, interns learn how to care for patients with a wide range of pediatric illnesses and illness acuities. Interns also participate in teaching medical students from Harvard Medical School and Boston University School of Medicine.

Building the foundation: Most of the inpatient experiences during the intern year involve covering the pediatric wards at both BCH and BMC. These teams are geographically based and comprise a mix of general pediatric and subspecialty patients. Interns also cover the Intermediate Care Program (a PICU step-down/floor step-up unit at BCH). Neonatal experiences take place in the newborn nurseries and NICUs at BMC and BWH. Finally, interns work in the Emergency Departments of BMC and BCH.

Ambulatory experiences: All residents belong to a Longitudinal Ambulatory Experience (formerly known as Continuity Clinic), where they care for their personal patient population over the course of three years including occasional work in Urgent Care. In addition to this, interns participate in a longitudinal Developmental and Behavioral Pediatric ambulatory experience during Keystone Quarter. Interns will also have a four week ambulatory experience in Adolescent Medicine. Interns are also exposed to subspecialty ambulatory clinics with either a longitudinal monthly clinic experience or monthly clinics that match their rotations.

Advocacy experiences: All interns participate in four total weeks of formal advocacy training during their Keystone Quarter. During this time, they gain knowledge of community resources and local and state advocacy programs, skills in media and legislative advocacy, and broader understanding of career opportunities in advocacy, public policy and global health.

Second Year, PL-2
The junior year is when residents get their most concentrated exposure to subspecialty and acute care settings, accompanied by an increase in decision-making autonomy and responsibility for high-acuity, often critically ill patients. The junior year also introduces supervisory roles and affords more opportunities for leadership and teaching.
Increased acuity, increased autonomy: Juniors are the only residents on the following BCH subspecialty inpatient services: GI, Pulmonary, Cardiology, Complex Care, Oncology, and Stem Cell Transplant. Breadth of subspecialty experiences is maintained by building in protected ambulatory experiences into each of these primarily inpatient subspecialty units.

Juniors also work with increased autonomy caring for acutely ill patients in the EDs at BMC and BCH, serve as the main responders to all deliveries requiring a pediatrician at BWH, and cover one of the three main teams in the Medical-Surgical Intensive Care Unit (MSICU). These rotations require juniors to build on the clinical skills and knowledge gained during the intern year, become more nuanced in their evaluations and differential diagnosis, and more independent and efficient in patient management.

Supervisory experiences: Juniors supervise interns in the BMC Ward and NICU and in the BCH Intermediate Care Program and Short Stay Unit. They are also frequently role models and sources of support for interns in the EDs at BCH and BMC. Many of our residents love to teach and lead, and these experiences are highly valued by juniors as opportunities to participate in shaping the culture of the BCRP.

Individualized Curriculum: The junior year includes 6 weeks of individualized curriculum and 4 weeks of elective time, of which 2 weeks are call-free. Juniors use this time to personalize their training experience by pursuing further exposure to pediatric subspecialties, dedicating time to research or teaching, engaging in global health experiences, and a myriad of other options. Some are structured by the residency program and others are individual and unique.

Expanded UHAT opportunities: UHAT residents have a half-day every other week when they can choose between a second continuity clinic and a project in urban health, advocacy, global health or public policy. Those selecting a project are coupled with a faculty mentor throughout the PL2 and PL3 years.

Third Year, PL-3

The seniors are the main leaders and teachers for the residents of the BCRP. The General Pediatrics supervisory experiences are highly valued by seniors, allowing them to integrate the knowledge and skills acquired in the previous two years, while taking an active role in promoting the development of interns and medical students.

Individualized curriculum: Seniors are also provided time to focus on individual and career interests through the individualized curriculum which consists of 12 weeks time on the Academic Development Block and four additional weeks of elective time. The Academic Development Block is a unique opportunity for senior residents to spend a sustained amount of time focusing on research, education, policy or advocacy projects that fit their clinical interests and future career goals. Our residents have used this time in an incredible variety of ways!

Team leadership and education: Senior residents supervise on the General Pediatric services at BCH and on the Pediatric Ward and NICU at BMC. Categorical track residents generally spend more of their supervisory time at Children’s Hospital, while most Urban Health and Advocacy track residents spend more time at Boston Medical Center. However, individual preferences for supervisory experiences are considered whenever possible.

Call-free time: All senior residents have approximately 6 weeks of call-free time during the year.
### Categorical Track
#### PL-1 Rotation Schedule

<table>
<thead>
<tr>
<th>Service</th>
<th>Units 1U = 1 mo</th>
<th>Night/Weekend Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Day Service (9E/SSU, 7W/PEAR, BMC Ward)</td>
<td>2-4</td>
<td>Work 2 wknds, Off 2 wknds</td>
</tr>
<tr>
<td>Inpatient Day Service (6E/HAIR)</td>
<td>0-1</td>
<td>No overnights, Work 6 days/wk</td>
</tr>
<tr>
<td>Inpatient Night Service (9E/SSU, 7W/6E, BMC Ward)</td>
<td>0-1</td>
<td>Work 5 nights on night float, off 2 nights</td>
</tr>
<tr>
<td>Newborn Nursery</td>
<td>1</td>
<td>No overnights. Work 2 wknds. Off 2 wknds</td>
</tr>
<tr>
<td>Child Development</td>
<td>1</td>
<td>No overnights. Cover day and evening shifts in ED</td>
</tr>
<tr>
<td>Adolescent Medicine</td>
<td>1</td>
<td>4 nights on ICP night float. Off 3 wknds.</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>1</td>
<td>Day and evening shifts</td>
</tr>
<tr>
<td>Intermediate Care Program (ICP)</td>
<td>0-1</td>
<td>Work 2 wknds, Off 2 wknds</td>
</tr>
<tr>
<td>Community Health and Advocacy</td>
<td>1</td>
<td>No overnights. Cover day and evening shifts in ED</td>
</tr>
<tr>
<td>Vacations</td>
<td></td>
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<td>Longitudinal Amb Experience</td>
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### Urban Health and Advocacy Track
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### Pie Charts

**Inpatient Gen Peds**
- NICU & Critical Care: 35%
- Ambulatory & Primary Care: 14%
- Emergency Medicine: 11%
- NICU & Critical Care: 35%
- Emergency Medicine: 11%
- NICU & Critical Care: 35%
- Ambulatory & Primary Care: 14%

**Vacation**
- NICU & Critical Care: 32%
- Emergency Medicine: 11%
- Ambulatory & Primary Care: 14%
- NICU & Critical Care: 32%
- Emergency Medicine: 11%
- Ambulatory & Primary Care: 14%
### Categorical Track
**PL-2 Rotation Schedule**

<table>
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<tr>
<th>Service</th>
<th>Units</th>
<th>Night/Weekend Call</th>
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<tbody>
<tr>
<td>Supervisory Experience: (SSU, BMC Ward, BMC NICU, ICP, 6E/HAIR)</td>
<td>1-2</td>
<td>SSU/Ward: 2 Friday calls, 2 Sunday day shifts</td>
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<tr>
<td></td>
<td></td>
<td>NICU: Every 4th night</td>
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<td>Medical-Surgical Intensive Care Unit</td>
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<td>Every 4th night</td>
</tr>
<tr>
<td>BWH Delivery Room (DR-1)</td>
<td>0.5-1</td>
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<td>Oncology</td>
<td>1-2</td>
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<td></td>
</tr>
<tr>
<td>Individualized Learning Time</td>
<td>2-2.5</td>
<td>8 wks every 4th night call. 2 weeks call-free</td>
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<td>Vacations</td>
<td>Two 2-wk breaks</td>
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<tr>
<td>Service</td>
<td>Units (1U = 1 mo)</td>
<td>Night/Weekend Call</td>
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<tr>
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<td>Vacations</td>
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**Categorical Track**

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<td>Longitudinal Amb Experience, 2nd clinic or project</td>
<td>1.5 afternoons/wk on average</td>
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**Urban Health and Advocacy Track**
Rotation Descriptions

**Keystone Quarter**

The Keystone Quarter was formed in 2013 with the goal of unifying ambulatory experiences during the intern year. This rotation was the result of combined efforts of residents, faculty, and program leadership as part of the Residency Program Training Committee's overall redesign of the BCRP curriculum. The block consists of 12 weeks of integrated Child Development, Advocacy, Primary Care and Emergency Department experiences. For interested interns a longitudinal subspecialty experience is available during the Keystone Quarter. A didactic lecture series compliments residents' outpatient clinic time and focuses on relevant topics ranging from clinical cases to advocacy issues. During the Keystone Quarter, residents will manage pediatric medical problems over time, learn to navigate care delivery systems, and hone skills in the delivery of comprehensive medical care. Aspects of the individual components that comprise the Keystone Quarter are discussed below.

**Keystone Quarter — Child Development**

Child Development is a joint rotation between Children's Hospital and Boston Medical Center (BMC). The rotation is designed to provide residents with a rigorous foundation in normal and abnormal infant and child development. Interns and Med-Peds PL-2 residents gain exposure to multi-disciplinary clinical programs providing assessment and follow-up for infants, children, and adolescents with developmental, behavioral and/or learning problems. Residents participate in testing with developmental-behavioral pediatricians, psychologists and educational specialists. Given its prevalence and social impact, there is a special focus on autism.

Nonclinical experiences in child development provide wonderful adjunct opportunities and more complete appreciation for this important discipline. Residents participate in Early Intervention home encounters, visit the Children's Hospital Childcare Center, and observe in classrooms, including special education settings and an elementary school in the Boston Public School system. Some also attend special education evaluation meetings and special school events. Also, one morning a month, each intern attends the Comprehensive Care Program, a multidisciplinary primary care outpatient clinic for children with complex medical problems, including children with significant developmental delays, mental retardation, seizure disorders, autism, and former premature infants. Didactics at both BMC and BCH within the framework of the Keystone Quarter augment the clinical experiences of this rotation and include topics such as developmental screening and surveillance in primary care, special education evaluations and services, mental health screening, failure to thrive, discipline, the child's experience of grieving and loss, and the child's experience of interpersonal violence.

**Keystone Quarter — Emergency Medicine**

BCRP interns rotate through the Boston Children's Hospital and Boston Medical Center Emergency Departments during the Keystone Quarter. During this block, learn principles of pediatric emergency medicine and the role of the emergency department in the health care delivery system. Didactic lectures focus on pediatric emergency medicine core topics, epidemiologic, economic and advocacy issues. Descriptions of the two sites and resident learning objectives are described below.

**Adolescent Medicine**

A joint venture between the outpatient adolescent centers at Children's Hospital and Boston Medical Center, the adolescent medicine rotation provides a solid foundation in the primary and specialty care of teenagers. Interns hone their skills in routine health maintenance for male and female patients, family planning, gynecologic care, and STD testing and treatment. Interns also gain skills in screening for substance abuse and responding appropriately to positive screens. During this month, interns are scheduled to see their own panel of adolescents, precepted by adolescent medicine attendings. Specialty clinic experiences such as sports medicine, scoliosis, reproductive health and dermatology are incorporated into the Resident's daily practice. Additional experiences to increase understanding of the scope of healthcare for adolescents include: visiting a school-based health center (September-June) and a field trip with an attending to a residential treatment school for emotionally disturbed teenage girls. This rotation has developed a comprehensive didactic curriculum focused on a variety of adolescent issues as well as effective implementation of evidence-based medicine. This includes development of a Critically Appraised Topic in adolescent medicine.
Cardiology

BCRP junior residents spend one month as part of the inpatient cardiology team at Boston Children’s Hospital. The service is composed of 4 residents, two first or second year cardiology fellows, two cardiology attendings, two nurse practitioners, up to 3 medical students, and an administrative medical teams associate. Each resident has primary responsibility for the evaluation and management of patients with a wide range of congenital and acquired pediatric heart diseases, under the supervision of the cardiology attendings and fellows. Each resident rotating primarily on the cardiology service spends five days in the outpatient clinic evaluating common and uncommon problems encountered in an academic cardiology practice. Daily didactic sessions presented by faculty cardiologists and geared exclusively to residents and medical students focus on core topics in pediatric cardiology from EKG reading and understanding cardiac catheterization data to care of patients with complex congenital heart disease.

Complex Care Service (CCS)

Due to the increasing number of children with complex health care needs, Children’s Hospital has created an inpatient team and an outpatient clinic solely dedicated to the care of these children and their families. These patients have medical problems involving a minimum of 3 organ systems and often participate in cooperative multidisciplinary programs at Children’s Hospital such as the Myelodysplasia Program, the Cerebral Palsy Program and others. During the junior year, residents rotate for 1 or 2 two week blocks on the inpatient CCS service comprised of 2 residents, a nurse practitioner, a clinical nurse specialist, a CCS social worker and a CCS attending. Patients may be hospitalized for acute medical problems such as aspiration pneumonia or increased seizure frequency, or they may be admitted for intensive management of more chronic issues, such as progressive weight loss. The service has an average daily census of 12-13 patients, most of whom require multiple medications and a range of assistive technologies. Residents gain proficiency in assessing medication interactions and are exposed to a wide variety of medical devices including gastrostomy and jejunostomy tubes, tracheostomy tubes, urinary stomas, ventriculoperitoneal shunts, and Baclofen pumps. Because many patients need input from multiple subspecialty teams, residents learn to synthesize consultant recommendations to deliver optimal care. A didactic lecture series provides education on the common problems that arise in children with complex medical disorders.

Emergency Medicine

In all three years of the training program, residents are exposed to emergency/acute illness experiences at both Boston Medical Center and Boston Children’s Hospital. Both emergency departments are access points for Emergency Medical Services (EMS) transports and ambulance traffic, and receive seriously injured and acutely ill pediatric patients.

Boston Medical Center is a busy Level 1 Trauma Center. The Pediatric Emergency Department (ED) provides 24 hour attending coverage by pediatric emergency-trained physicians, emergency medicine physicians, and 3rd year pediatric emergency medicine fellows. The BMC Pediatric ED treats approximately 30,000 patients a year, ranging in age from newborn to 21 years old. It receives more patients by EMS than any other pediatric facility in Boston. It has 12 fully equipped rooms for non-acute care, an acute care/observation area with 4 beds, and a trauma/resuscitation suite.

The Emergency Dept at Boston Children’s Hospital is also a Level 1 Trauma Center and provides 24 hour attending coverage by pediatric emergency-trained physicians and by 3rd year pediatric emergency medicine fellows. The Children’s ED sees more than 60,000 ill and injured children per year and has one of the premier fellowships in pediatric emergency medicine.

Dr Fleisher (right) on one of his shifts in the ED

ER patient checking Physician-in-Chief

Gary Fleisher for dextrocardia
Resident responsibilities in both Emergency Departments include:

- Evaluation, management and disposition of patients.
- Consultation and communication with other services and consultants.
- Discussion of cases with primary care and referring physicians.
- Performance of procedures (e.g., venipuncture, arterial puncture, spinal tap, laceration repair, abscess incision and drainage, foreign body removal, splinting, bag-mask ventilation).

Regular conferences occur at both Boston Medical Center and Children’s Hospital, including didactic lectures, mock codes, hands-on practical workshops, and simulations.

Gastroenterology

Three junior residents rotate through the gastroenterology service at Children’s Hospital each month. The rotation incorporates both inpatient and outpatient experiences to maximize resident exposure to the full spectrum of gastroenterology care. The goals of this rotation include assessment of patients with gastrointestinal complaints, the diagnosis and management of common gastrointestinal disorders, and introduction to endoscopy and other procedures unique to this specialty. All residents attend a didactic series that includes a weekly fellow-run seminar and 10 to 12 mini-lectures on basic subjects including gastroesophageal reflux disease, constipation, malabsorption, the pathogenesis of diarrhea, the diagnosis and treatment of inflammatory bowel disease, nutritional assessment, total parenteral nutrition, the approach to abdominal pain, neonatal cholestasis, and the evaluation of liver disease.

On the inpatient service, two residents, a first year fellow, a nurse practitioner, and a gastroenterology attending manage an average census of nine patients (range 5-20 patients) with a variety of severe gastrointestinal illnesses. Built into each month-long rotation is a 10 day outpatient block, during which residents attend clinic three mornings a week and observe endoscopic procedures on the other two mornings.

General Pediatric Inpatient Services

Every intern has at least three months of general inpatient experience. Inpatient teams at Children’s Hospital are typically unit-based, allowing closer relationships with nurses, more contact with families, and less time spent commuting between floors. During the junior and senior years, residents assume a supervisory role in the care of general pediatrics patients. Supervising residents are team leaders and provide much of the bedside teaching to the interns and medical students. Inpatient ward teams are divided into “day” and “night” teams.

Organization of the general inpatient services:

- Boston Children’s Hospital 9 East Gen Peds and Short Stay teams: 1 senior resident (Gen Peds), 1 junior resident (Short Stay), 4 interns, and up to 4 medical students
• Boston Children’s Hospital 7 West (PEAR team – Pulmonary, Endocrinology, Adolescent, Renal): 2 senior residents, 4 interns, a nurse practitioner, and up to 4 medical students
• Boston Children’s Hospital 6 East (HAIR team – Hematology, Allergy, Immunology, Rheumatology): 2 junior residents, 1 intern, and up to 2 medical students
• Boston Medical Center Inpatient Wards: 1 senior resident, 1 junior resident, 3 pediatric interns, one family medicine intern, and 3-4 medical students.

The General Pediatrics teams at Boston Children’s Hospital care for patients with a wide variety of general pediatric problems as well as a varying number of subspecialty patients from: adolescent medicine, allergy/immunology, endocrinology, hematology, infectious diseases, metabolism, nephrology, pulmonology, rheumatology, and toxicology. The Short Stay Unit cares for patients with acute, common and less complex pediatric illnesses that generally require only a brief hospitalization.

The inpatient ward at Boston Medical Center is a 36-bed unit. The pediatric ward team cares for general pediatrics patients and patients from subspecialty services, including endocrinology, gastroenterology, hematology, infectious diseases, neurology, and pulmonology.

Intensive Care Unit
Residents gain experience in Critical Care Medicine during both the PL-2 and PL-3 years. All PL-2 residents complete a four week rotation in the 30-bed Medical-Surgical Intensive Care Unit (MSICU) at Children’s Hospital. In the PL-3 year senior residents rotate as the sole resident in the 6-bed pediatric ICU (PICU) at Boston Medical Center and in the 12-bed Medical ICU (MICU) at Children’s Hospital.

In the Children’s MSICU, junior residents serve as primary providers for medical and select surgical patients and participate in daily rounds and family meetings. They attend morning conference as part of a comprehensive didactic curriculum that includes formal mock code sessions delivered in the sophisticated simulator suite. Attendings conduct formal debriefings after mock codes using video footage to enhance feedback. There are also weekly sessions focused on procedures and emergency scenarios, with the assistance of simulation.

Most senior residents also have at least one ICU experience in either the BCH MICU or BMC PICU. During these rotations, the senior resident works directly with the supervising critical care attending or fellow. These experiences help residents develop crucial decision-making skills. Building on concepts introduced in the PL-2 year, residents gain proficiency in the management of severe status asthmaticus, mechanically ventilated patients, hemodynamically unstable patients, patients with dangerous ingestions or toxic exposures, and patients in status epilepticus. Residents also participate in advanced vascular access, airway management, and delivery of emergency medications. Faculty didactics complement the experiential learning on each unit.
Intermediate Care Program (ICP)
The ICP is a 10-bed unit that cares for patients who require more intensive nursing than can be provided on the floors. Commonly encountered disorders include diabetic ketoacidosis, severe status asthmaticus, complex medical patients requiring intensive respiratory monitoring or noninvasive ventilation, and significant electrolyte abnormalities (such as diabetes insipidus) requiring close monitoring and frequent blood analyses.

The ICP team is composed of an attending, one junior resident, two interns and a nurse practitioner. Interns assume primary responsibility for patient care, while the junior resident serves as the team leader. The nursing staff (who care for 1-2 patients each) and dedicated respiratory therapist participate actively in morning and night rounds. An interdisciplinary approach is emphasized. Given the intimate structure of the team and the higher acuity on the unit, many formal and informal teaching opportunities arise. Daily didactics focus on topics such as management of DKA, airway obstruction and respiratory compromise.

Newborn Care: Neonatal Intensive Care Unit, Newborn Nursery and Delivery Room
PL-1 year: Newborn Nursery
Interns rotate on either the well newborn hospitalist service at Brigham and Women’s Hospital (BWH) and Boston Medical Center (BMC). The BWH NICU is a 48-bed unit divided into two 16-bed acute care pods, and two 16-bed intermediate care pods. At the BWH NICU, two interns are divided into two teams, with the interns assigned to each team responsible for the patients in one of the acute care pods and one of the intermediate care pods. The acute care interns are supervised by an attending neonatologist and fellow. The transitional pod intern manages common newborn problems in the triage area of the NICU supervised by the PL2 delivery room resident. The NICU rotation at Boston Medical Center is comprised of a 15-bed NICU and a 6-bed intermediate care NICU. The BMC NICU team consists of an attending neonatologist, one senior resident, one junior resident and two interns. Besides caring for critically ill neonates, residents obtain extensive experience in the resuscitation and stabilization of newborns at high-risk deliveries. At both sites neonatal attendings are on site 24 hours per day to provide supervision and teaching. Residents participate in a comprehensive educational curriculum including daily lectures by attending neonatologists covering common neonatal problems, such as respiratory distress syndrome, necrotizing enterocolitis, hyperbilirubinemia, and nutrition. All residents are trained in the Neonatal Resuscitation Program during intern orientation and then re-certify during their PL-2 year.

During the junior year residents rotate through the BWH NICU as the “DR1” delivery room resident — the first call to all deliveries requiring a pediatrician. The resident is responsible for attending deliveries with a NICU nurse and respiratory therapist, supervising an intern, triaging newborns in the delivery room and well baby nursery, and supervising the care of late-preterm and stabilized infants in one of the intermediate care pods in the NICU. In the BMC NICU, junior residents assume a supervisory role on the NICU team during the day, overseeing the interns on rounds and at deliveries. At night, the junior resident covers the an intermediate care pod in the NICU as well as deliveries, with supervision by an on-site neonatologist.

Residents in both years recruit newborns from their newborn rotations to their continuity patient panels.

NIU duty

Juniors serve as Team Leaders in the ICP

PL1 and Supervisory Years: Neonatal ICU
Interns and residents rotate through the NICU at Brigham and Women’s Hospital (BWH) and Boston Medical Center (BMC). The BWH NICU is a 48-bed unit divided into two 16-bed acute care pods, and two 16-bed intermediate care pods. At the BWH NICU, two interns are divided into two teams, with the interns assigned to each team responsible for the patients in one of the acute care pods and one of the intermediate care pods. The acute care interns are supervised by an attending neonatologist and fellow. The transitional pod intern manages common newborn problems in the triage area of the NICU supervised by the PL2 delivery room resident. The NICU rotation at Boston Medical Center is comprised of a 15-bed NICU and a 6-bed intermediate care NICU. The BMC NICU team consists of an attending neonatologist, one senior resident, one junior resident and two interns. Besides caring for critically ill neonates, residents obtain extensive experience in the resuscitation and stabilization of newborns at high-risk deliveries. At both sites neonatal attendings are on site 24 hours per day to provide supervision and teaching. Residents participate in a comprehensive educational curriculum including daily lectures by attending neonatologists covering common neonatal problems, such as respiratory distress syndrome, necrotizing enterocolitis, hyperbilirubinemia, and nutrition. All residents are trained in the Neonatal Resuscitation Program during intern orientation and then re-certify during their PL-2 year.

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Residents in both years recruit newborns from their newborn rotations to their continuity patient panels.
Oncology
Inpatient oncology care at Boston Children’s is delivered by disease-specific teams: the hematologic malignancy team, the solid tumor team, and the neuro-oncology team. Each disease-specific team is directed by an oncologist, often in conjunction with an oncology fellow. Four junior residents care for patients on the hematologic malignancy and solid tumor teams, providing overnight care for the neuro-oncology patients. Residents care for patients with new cancer diagnoses, complications of malignancy or cancer-directed therapies (including febrile neutropenia), relapsed malignancy, and concurrent medical problems. Residents work side-by-side with two nurse practitioners who have significant expertise in pediatric oncology. Goals of the rotation include: understanding common presentations of childhood cancer, management of oncologic emergencies, effective communication with families, management of febrile neutropenia, and identification and management of common complications of chemotherapy. The rotation also allows residents to gain an understanding of issues related to end-of-life care in a pediatric population. This rotation is augmented by didactic teaching sessions by oncology fellows and attendings, tumor boards and an outpatient experience in the Jimmy Fund Oncology Clinic at the Dana Farber Cancer Institute.

Pulmonary
Residents spend one month of the PL-2 year on the Pulmonary service. The month builds on the foundational experience during the PL-1 year caring for patients on the Pulmonary subspecialty service. The inpatient Pulmonary team consists of three junior residents, a pulmonary fellow, a nurse practitioner with expertise in the care of pediatric pulmonary patients, and an attending. Residents are primarily responsible for pulmonary patients with a wide range of conditions including complicated asthma, interstitial lung disease, pulmonary hypertension, cystic fibrosis, as well as issues surrounding lung transplantation. Pulmonary fellows and attendings teach a morning curriculum Monday through Friday. Residents spend a week of the month in the outpatient pulmonary clinic evaluating and managing new patients. Afternoons during this week are spent in the PFT lab, performing consults, or participating in procedures such as sweat tests and bronchoscopies.

Electives
In addition to the six months of Individualized Curriculum each resident will have 8 additional weeks of elective time distributed between their PL-2 and PL-3 years. Approximately six week of this elective time will be call free. All pediatric residents must complete 7 months of subspecialty experiences. Because the BCRP curriculum incorporates several months of subspecialty experiences, residents may pursue a broad array of clinical and research interests during their electives, including rotations in complementary fields such as anesthesia, toxicology, transport medicine, international medicine, or surgery.

Night Call and Night Float Teams
Patients admitted to each of the general pediatrics services at Boston Children’s and BMC receive care at night from a dedicated “night team” consisting of an intern and supervising resident. Each “night team” rotation lasts two weeks, affording the team continuity of care and consistency between the intern and the supervising resident. On average, interns have two 2-week “night team” rotations on a general pediatric service over the course of the year. On-call rooms and meal allowances are provided for house officers on night duty.
Extended Shifts

For junior and senior year rotations that do not employ "night teams", residents take in-hospital call every 4th night. On-call rooms and meal allowances are provided for house officers on call at all three hospitals. All rotations in the BCRP are in full compliance with the ACGME work hour regulations.

Longitudinal Ambulatory Experiences

Primary Care Experience

The continuity program provides a special experience for residents to foster the physical, intellectual and emotional growth of children, as well as to observe and manage the course of certain diseases and therapies over an extended period of time. Each resident carries a panel of patients specially designed to ensure broad exposure to multiple age groups and diverse medical problems.

Continuity sites are available in both hospital and community settings. In addition to typical primary care clinic experiences, there are a number of other clinic opportunities including primarily Spanish speaking clinics at Martha Eliot Health Center and East Boston Health Care Center, a young parent continuity clinic at Children’s Hospital, as well as several other multicultural, community-based health clinics.

Residents in the Categorical track devote one afternoon each week throughout the three years to their continuity practice. Residents are relieved of other clinical responsibilities during their scheduled continuity clinic time. Residents’ clinics are rescheduled for an alternate day when the resident is unavailable for their regular clinic day.

In the first year, Urban Health and Advocacy track (UHAT) residents spend one-half day each week in their continuity sites. Beginning with the PL-2 year, UHAT residents select an additional half-day experience to augment their training and often choose a second continuity clinic.

Academic Innovations Collaborative

Children’s Hospital Primary Care Center (CHPCC) and Martha Eliot Health Center (MEHC) are two of the continuity sites available to residents. Both are engaged in a patient centered primary care redesign effort through the Academic Innovations Collaborative (AIC), established by the Harvard Medical School Center for Primary Care. The AIC was created to foster rapid transformations in care delivery and education within Harvard-affiliated primary care teaching practices and BCRP residents are active participants.

CHPCC and MEHC’s redesign is focused on four major transformation areas: multidisciplinary patient care teams, population management, complex disease management, and patient empowerment. Some of the major changes to be rolled out over the two years of the collaborative include the creation of primary care teams, development and use of patient registries to facilitate population and complex care management, and the implementation of new technology, including clinical decision support and discharge and care plan summaries.

A chief goal of the AIC is to involve our residents in redesign activities. The resident education curriculum will be rewritten to include topics related to team-based care delivery and population management; residents are integrated into the care teams, attending team huddles and included in team communication regarding patient issues; and residents’ input is solicited through surveys and informal feedback sessions.
**Longitudinal Subspecialty Experience**

The BCRP is invested in developing a longitudinal subspecialty experience whereby residents can achieve early and sustained exposure to outpatient subspecialty medicine. The BCRP is currently piloting this experience for all three residency classes.

During the PL-1 and PL-2 years, a select number of Categorical residents will participate in a subspecialty clinic in addition to their primary care continuity clinic. They will be relieved of their other clinical responsibilities once per month to attend the subspecialty clinic of their choosing. During the PL-3 year, residents may choose to participate in a longitudinal subspecialty clinic in place of their primary care clinic.

**Electives**

Many different elective opportunities are available at both Children’s Hospital and the Boston Medical Center, including experiences in clinical care, research, medical education, clinical outcomes and advocacy. In addition, residents can select a variety of international experiences. Funding is available through various scholarships including the Von L. Meyer and Schliesman awards. Additionally, the Department of Medicine at Children’s Hospital and the Department of Pediatrics at Boston Medical Center award scholarships for travel to national meetings such as the American Academy of Pediatrics or the Pediatric Academic Societies, and the meetings of subspecialty societies. In addition, funding is available from the Fred Lovejoy Research and Education Fund and the Joel Alpert Fund, for research projects conducted during residency, and from the Alpert Children of the City endowment for community-based research projects.

**Funding sources:**

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**Individualized Curriculum**

Each resident will have six months of an Individualized Curriculum consisting of three months of the Academic Development Block and three months of other rotations relevant to his or her future career. The six months are distributed as follows:

- PL-1 Year: 0.5 months
- PL-2 Year: 1.5 months
- PL-3 Year: 4 months (includes 3 months of ADB time)

**Mentoring and Individualized Curriculum**

The BCRP Academies provide groups of faculty members who have demonstrated an interest in being mentors and advisors for residents within the Academies.

**Academic Development Block**

The BCRP curriculum contains an innovative element for all PL-3 residents called the Academic Development Block (ADB). This 3-month rotation is unique to the BCRP and is designed to allow residents to customize their training to attain the skills, experience and knowledge necessary to further their careers. The ADB contains a core seminar curriculum and allows dedicated time for individualized mentored research, education, quality improvement or advocacy projects.

The core curriculum, delivered in a three-hour morning session once a week, is designed to enhance and augment the knowledge gained during the first two years, and is directed towards lifelong learning and skills, including critically appraising the medical literature and understanding health care for children in the context of local, state and federal policies. It focuses on the following specific skills:
• Creating and applying new knowledge — research study design, biostatistics, epidemiology, evidence-based medicine, literature searching and human subjects considerations for children.
• Health care policy and environment — health care disparities, economics and funding, delivery systems, and resource allocation.
• Molecular Medicine — future “hot” areas of basic science research, including genetics and genomics as they are likely to affect clinical care.
• Organization and quality of care — quality improvement, patient safety, and legal issues in the practice of medicine.

These sessions are led by expert faculty from both institutions and include basic and clinical researchers with interests in translational medicine, clinical and outcomes research, public policy and advocacy.

The second, and major, component of the block is protected time for residents to focus on research projects, medical education projects, community advocacy experiences, and/or more in-depth exposure to clinical experiences. Residents meet individually with faculty mentors two or more months before the start of ADB to design their projects. Senior residents have used their ADB time in a wide variety of ways to explore career alternatives, either to start or complete a primary research project, or undertake a project that will round out their own training (and often contributes to the training of other residents). The diversity of ADB activities reflects the diversity of interests and career paths of our residents.

Over the past five years, the results from approximately half of the projects have been presented at national meetings and/or culminated in a peer-reviewed publication. A paper describing outcomes of the rotation has recently been published (Vinci RJ et al. Pediatrics 2009; 124:1126-1134).

Examples of Recent Projects
• Investigation of yield of lumbar puncture for meningitis following status epilepticus
• Weight perception and unhealthy weight control behaviors among gay, lesbian and bisexual youth
• Examination of fatty acid binding protein 4 expression in lymphatic malformations
• Retrospective study of risk factors for fatal and non-fatal pediatric firearm injuries in the United States
• Study of vaccine coverage and parental attitudes on immunization in India
• Retrospective clinical review combined with blinded bone marrow re-review to define clinical predictors of failure for patients with aplastic anemia treated with immunosuppressive therapy
• Investigation of seroconversion rates following double dose hepatitis B vaccine among HIV-infected children and adolescents
• Review of colonoscopies to determine agreement between endoscopic assessment of mucosal findings and pathologic findings on biopsy
• Genomics/proteomics approach to characterized differences between adults with acute myelogenous leukemia
• Summary of common practices in diagnosis and treatment of malaria in Nigeria
• Examination of methylenetetrahydrofolate dehydrogenase 2 as a target for treatment in acute myelogenous leukemia
• Chart review on aortic regurgitation after interventions for aortic stenosis in staged palliation of hypoplastic left heart syndrome
• Discovery and validation of role of mobile genetic elements in malignant rhabdoid tumors
• Evaluation of a sign out system and intervention aimed at improving pass off of care among residents
• Educational trial examining different methods of teaching simulation and development of longitudinal residency simulation curriculum
• Completion of a study of procalcitonin as a test for serious bacterial infection among febrile infants
• Investigation of blood product exposure and clinical outcomes in PICU patients requiring ECMO
• Development of a pediatric training curriculum in Liberia
• Multi-center prospective clinical trial examining vitamin D levels and clinical factors related to children hospitalized with bronchiolitis
• Effect of hydroxyurea on emergency department visits in patients with sickle cell disease
• Study of long-term pulmonary artery stenosis after repair of aberrant pulmonary artery in infancy
• Effect of cranial radiation on growth hormone and parathyroid hormone abnormalities.
• Prognosis following lung transplantation
• Prospective multi-center study of bronchiolitis admissions
• Health needs assessment of orphaned children in Malawi
• Predictors of CSF pleocytosis in febrile infants
• Ultrasound evaluation of flow-related arterial dilatation in HIV infected children
• Use of non-invasive end-tidal CO₂ monitoring in asthma and bronchiolitis
Education

Education First

Education is a priority in the BCRP. From Grand Rounds by world-renowned specialists to impromptu overnight clinical instruction, teaching and learning permeate all aspects of residents’ daily lives. At both BMC and BCH, there are daily protected teaching rounds and noon conferences that foster discussion and debate between residents and faculty. Through Family Centered Work Rounds, residents benefit by learning directly from senior faculty, fellow residents, and their patients at the bedside.

Residents are also given the opportunity to learn to teach right from the start, cultivating their skills as teachers and reinforcing their own knowledge through the art of teaching. Our Boston University and Harvard medical students consistently identify residents as one of the most important sources of instruction. As part of our commitment to case-based teaching, residents supervise medical student patient encounters all the way from the initial history through the presentation on rounds.

Resident Involvement in Curriculum Design

Through the Residency Program Training Committee and the Medical Education Academy, resident feedback and input are driving forces behind changes in the curriculum —which is evolving to meet the educational needs of the residents. Currently, several residents are leading the charge to improve the BCRP curriculum, with goals of increasing the number of hands-on/skills-based sessions, enhancing resident teaching from less common subspecialties like ophthalmology, and providing comprehensive review materials for residents on night rotations or vacation who miss certain teaching sessions.

Educational Opportunities

Below are brief descriptions of the daily educational opportunities that have been built into the residency. This collection of case presentations, conferences and lectures work in conjunction to augment the learning that occurs organically through patient care. While this list is relatively comprehensive it is certainly not exhaustive and residents can always avail themselves of the multiple educational opportunities within Harvard, Boston University and the city of Boston itself.

Medical Grand Rounds

Weekly Grand Rounds at both institutions provide exposure to leading clinicians and researchers providing cutting-edge information about their areas of expertise. Grand rounds features topics from multiple areas of medicine including clinical topics, basic science research, global health, and public policy.

Conferences - Boston Children’s Hospital

BCH General Pediatrics Teaching Conferences

This afternoon conference is aimed at all interns on inpatient, non-subspecialty pediatrics rotations with a revolving schedule of topics, to ensure exposure to a wide breadth of content over the year. These conferences are held three times a week in the afternoon, in recognition of how busy mornings are. The conference time is protected by supervising residents so that intern learning can occur uninterrupted, and its interactive, small group format is led by chief residents and expert attendings. The curriculum has been developed to provide interns with a nuanced understanding of the pathophysiology and management of common pediatric diseases, hone basic skills such as IV placement or lumbar punctures, and provide a place for interns to ask questions they encounter in their first year as a general pediatrician.

Residents work closely with senior faculty

Dr. Sectish attending and teaching on Gen Peds
BCH Noon Conferences
This is a lunchtime conference series focused on general pediatrics that is offered to all residents. Sessions emphasize the principles of general pediatrics and are given by the relevant experts at each institution. Conferences employ a wide variety of educational formats, including traditional didactic teaching, case-based learning, hands-on/skills sessions, and educational games. There is an overarching curriculum that spans the entire year and covers all pediatric specialties. A fantastic lunch is provided daily.

Senior Rounds
This daily conference is perennially one of the highest rated educational experiences at the BCRP. A chief or senior resident is charged with presenting a recently admitted patient with an unusual or unknown diagnosis. A discussion between the residents and senior faculty follows, with a focus on differential diagnosis, management and prognosis, as well as nuances in the individual case, which frequently prompt significant discussion. Priorities include developing generalizable lessons from unusual cases as well discussing unusual presentations of common diseases. Faculty from different specialties attend on different days, and are invited at the beginning of the year by the senior residents (considered a true honor by faculty).

Intern Rounds and Junior Rounds
There are dedicated, separate weekly noon conferences for interns and juniors at BCH that focus on case-based learning and are moderated by a chief resident. Emphasis is placed on clinical decision-making and management.

Conferences – Boston Medical Center (BMC)
BMC Noon Conferences
Noon report at BMC occurs daily from Tuesday to Thursday, and highlights interesting cases and teaching topics from the wards, emergency department, NICU, PICU, and international settings. A focus on differential diagnosis, management, and treatment are discussed in a setting where residents can draw from the experiences and knowledge of the many senior faculty members who attend. Conferences employ a wide variety of educational formats, including traditional didactic teaching, case-based learning, hands-on/skills sessions, and educational games. On Mondays, interns at BMC attend Intern Report, a case-based conference moderated by a Chief Resident, while junior and senior residents attend the Leadership Series, aimed at developing supervisory skills in the clinical setting. On Fridays, residents at BMC rotate through the Mock Code and Evidence-Based Medicine in Pediatrics curricula. A delicious lunch is provided daily.

Case of the Week
This weekly presentation at Boston Medical Center is organized and moderated by the senior residents rotating in the PICU, the NICU, the ED, and the Ward. The cases are current or recently discharged patients chosen to illustrate specific topics. The resident selects the case and works with a subspeciality faculty member(s) to develop better like pizza in this program
the conference. The presentation is attended by all residents rotating at BMC as well as the pediatric faculty.

**Monthly Conferences**

**Research, Advocacy, and Policy (RAP) Series**

RAP is a monthly seminar organized by senior residents for UHAT residents. UHAT residents have protected time to attend these sessions and are freed from their clinical duties for the afternoon when their schedule allows. The seminar topics vary based on senior resident interests, and they invite community leaders to speak with and teach residents. Past topics have included lobbying and health policy, featuring a Massachusetts lobbyist to run a skills session on effective communication with members of Congress. Another topic highlighted youth violence in the Boston area, inviting Street Smart, a local organization that works on the ground with high risk youth to prevent instances of violence. Another focused on research in obesity using geo-mapping to identify food deserts and high risk areas of obesity. The RAP series is one of the UHAT residents’ favorite seminars of the year, highlighting work that residents are passionate about in addition to introducing community and national leaders to our residency.

**Basic Science Journal Club/Seminar**

In this monthly conference, a resident selects a basic science article that illustrates a fundamental advance and has translational implications. He or she prepares a seminar designed to teach broadly about the topic as well as focus on the article or articles distributed in advance. One or two experts from the Boston area are selected by the presenter and invited to sit in and contribute to the discussion. Examples of recent topics include: highly specific new anesthetics, pitfalls in analysis of genomic data, auto-inflammation from escaped DNA, genomic screening for autism, microRNAs, diabetic autoimmunity, peptidomimetics, long QT syndrome, use of gene expression in new drug discovery, gene editing, and the molecular basis of gastrointestinal development.

**Clinical Science Journal Club/Seminar**

Similar to the Basic Science Journal Club, the Clinical Science Journal Club is a monthly conference, moderated by a house officer who selects and presents a clinically based research article with support from specific faculty. He or she prepares a seminar on the topic designed to foster a larger discussion of evidence-based clinical decision making. Besides discussing the clinical material, each session focuses on a specific biostatistics topic. Examples of recent topics include: a new targeted therapy for specific cystic fibrosis gene mutations, acyclovir after neonatal herpes, and screening for neuroblastoma.

**Ethics Conference**

A monthly seminar moderated by local experts on pertinent ethical issues that are relevant to pediatric patient care. These conferences often involve reviewing literature related to ethical issues and sometimes include patients and their families. Examples of topics discussed include: withdrawal of care in the NICU, care of the adolescent patient, and disclosure of medical errors.

**Humanism Curriculum**

Developed by one of the previous senior residents during her academic development block, this monthly seminar series for the interns and junior residents focuses on many of the difficult issues that physicians encounter regularly. Residents are assigned to a small group and a faculty preceptor with whom they meet throughout the year. The seminars focus on issues such as the difficult patient or family, balancing work and home life, dealing with death and dying, medical errors, and cultural diversity in medicine.

**Resident-as-Teacher**

The BCRP emphasizes the vital role that residents play in teaching medical students from both Harvard and Boston University Medical Schools during their pediatric clerkships, teaching other residents during supervisory rotations, and future careers as educators to colleagues and patients. To help residents become successful in these roles, regular sessions throughout the year and during program-wide retreats are dedicated to exercises on effective teaching. In addition, a formal Resident-as-Teacher Program exists at Children’s Hospital to further these efforts. As part of this program, senior residents receive one-on-one feedback on their teaching from

*Residents spend a lot of time teaching Harvard and BU students one-on-one*
trained senior faculty members, based on direct observation. Additionally, all residents are taught skills such as teaching at the bedside, use of the “one minute preceptor,” giving effective feedback and delivering effective presentations. Finally, Residents take the lead in presenting at Basic and Clinical Journal Clubs, and in selected Grand Rounds. These programs and experiences contribute to an atmosphere in which teaching is highly valued. As a result, medical students from both institutions regularly recognize members of our housestaff with accolades and formal teaching awards.

**Leadership Seminar**

Historically, medical schools and residencies have not given residents adequate skills and teaching to become great managers and leaders. At Boston Medical Center, junior and senior residents participate in a weekly leadership seminar to help develop qualities inherent in strong, effective leaders: self reflection/self awareness, conflict resolution/feedback and vision. It is designed to be case-based, interactive, and relevant to the needs of the pediatrics residents.

**Retreats**

Semiannual, day long house staff retreats allow house officers to reflect on their clinical experiences and on the training program. This year’s spring retreat focused residents on how to make the residency more flexible under new residency review committee requirements adding individualized curricula to pediatrics programs. Many important and substantive changes have resulted from these retreats.

**Simulators**

Boston Children’s Hospital and Boston Medical Center have invested in state-of-the-art, high-fidelity simulator programs to optimize learning in the acute care setting. Children’s Simulator Suite is a faithful reproduction of an intensive care unit bed space. The suite is outfitted with gas outlets, medical equipment, and both pediatric and infant patient simulators. Next to the simulated patient room is a video control room linked to a conference room through closed circuit cameras for video-based debriefing sessions. The PL-2 year ICU rotation features weekly mock codes led by the residents with video debriefings. In addition, there are frequent procedure sessions led by the ICU fellows to practice procedures such as intubation, central line placement, and chest tube placement.

At BMC, simulation sessions occur either in a similar simulation suite or in the PICU by using a portable SimBaby, which can simulate a range of conditions and enables a number of procedures from intubation to IV placement. The PICU senior and Chief Residents develop a weekly mock code for the ward team, which starts with interns learning to use basic equipment and progresses to...
the ward junior running a complex cardiac code. Recent cases have included severe myocarditis and status epilepticus.

Given the importance and complexity of running a code well, the practice of mock codes is not restricted to ICU rotations. They are scheduled throughout the intern, junior and senior years. The focus is on increasing skill level over time, knowing how and when to call for help and importantly, the basics of good communication in running a successful code.

**Role of Fellows**

Many of the fellowships at Boston Children’s Hospital are the best in their specialty, and the hospital has many fellows who are exceptional clinicians, teachers and individuals. They provide invaluable assistance in teaching about and caring for complex patients. Fellows are not residents, however, and they do not assume resident roles. Only residents can write orders (and request consults) in the BCRP. Most residents feel that the fellows are an integral part of their education and augment their clinical experience through dedicated and impromptu teaching sessions. While all subspecialty services have fellows as part of the care team at BCH, there is minimal fellow presence at BMC with a few exceptions (ID, Neurology and Emergency Medicine departments).

**Libraries**

The Children's Hospital Library is a beautiful building that looks out on the Prouty Garden and is accessible to housestaff at all hours. It is a quiet respite with private carrels and other work and reading areas, and is a great place for study or for the literature investigations required for modern pediatric care. The library offers a wide range of services including various databases, Up-To-Date, free copying, scanning and printing facilities, and interlibrary loans. Staff librarians can assist you with performing complex literature searches, whether for immediate patient management or for ongoing research. They also offer introductory seminars in such areas as EndNote, Mendeley, and PubMed for interested residents.

The Francis A. Countway Medical Library at Harvard Medical School, next door to Children's Hospital, is one of the world’s largest medical libraries. The library holds over 630,000 volumes, subscribes to 3,500 current journals, of which over 1,500 are available in electronic form, and houses over 10,000 non-current journal titles. All the libraries resources are available to residents, and all electronic journals articles can be downloaded as pdf files. Many electronic textbooks and other electronic databases, such as MD Consult are also available to BCRP housestaff. All electronic resources are available over the internet from home. The Countway also offers access to the extraordinary library resources of Harvard University and an exceptional History of Medicine collection.

The Boston University School of Medicine Alumni Medical Library is a state-of-the-art library that serves the faculty, staff and students of the Boston University schools of Medicine, Dental Medicine, Public Health, and the Boston Medical Center. Besides its excellent medical collection, it has over 1500 online journals and 30 current, clinical electronic textbooks available to all residents.

**Medical Information Systems**

Timely retrieval of clinical information is a priority for house officers. An integrated electronic hospital information system is available at both institutions to provide state-of-the-art information management. All vital signs and flowcharting, imaging, laboratory results, diagnostic studies, documentation by all outpatient and inpatient clinical services, physician orders, prescriptions, and drug formularies as well as some decision support capabilities exist in our electronic health records (EHR). Children’s Hospital recently received HIMSS Analytics Stage 7 award for being completely paperless, putting it in rare company. Integrated email and paging systems facilitate communications across both sites. Residents play an important role in the implementation of the
EHR and the improvement of these systems.

Highly secure remote access to both the Boston Medical Center and Children's Hospital systems is available to all residents 24 hours per day, including records, lab results, radiology images, and paging. In addition, the BCRP website provides password-restricted access to useful information for residents such as colleague contact information, rotation survival guides, upcoming schedules and announcements, and a database of useful articles and presentations.

Research

Boston Children's Hospital

Children's is home to the world's largest and most active pediatric research enterprise and one of the largest research programs of any independent hospital. The hospital has approximately $225 million in research funding per year and more than 755,000 square feet of state-of-the-art laboratory space. The research mission of Children's Hospital encompasses basic research, clinical research, community service programs and the training of new scientists. More than 500 investigators, including 6 members of the National Academy of Sciences, 12 members of the Academy’s Institute of Medicine, 15 Fellows of the American Academy of Arts and Sciences, and 13 members of the Howard Hughes Medical Institute are part of Children's truly extraordinary research community. Four Children’s investigators have won the Nobel Prize and six have won the nearly equally prestigious Lasker Award.

Boston Medical Center

BMC is nationally recognized for clinical, health services, and policy research as it relates to low income and minority children. Areas of research include child development and early literacy, perinatal epidemiology, gene-environment interactions and low birth weight, the impact of policy, such as welfare reform, housing and nutrition on health, prenatal drug exposure on child health and development, HIV/AIDS in children, the use of information technology to improve quality, environmental health and international and immigrant health.

Quality of Research

The quality of the research done by Children's Hospital and Boston Medical Center faculty is especially impressive. During the ten years from 2002 to 2011, researchers from Children's published 12 times more papers in the top three basic science journals than any other pediatric program, and 2.4 times more than the top 20 ranked pediatric programs combined! The proportion of papers published in the top 35 basic science journals exceeded all the Boston ‘adult’ hospitals and all medical schools (including their basic science departments), except for Harvard Medical School. Similarly, in clinical research, BCRP researchers published 3.6 times more papers in the top three clinical journals (New England Journal of Medicine, JAMA and Lancet) than any other pediatric program. Indeed, at Boston Medical Center 3.3% of pediatric papers during 2002 to 2011 appeared in these three journals, compared to an average of just 0.58% for the other top 20 ranked pediatric institutions.

Research is an active aspect of the residency program as well. This is reflected in the high proportion of residents with previous research experience, the enthusiasm of the residents for their journal clubs and their own research, and just by conversations in the hallways or at rounds. Many outstanding physician-scientists and general academic researchers serve as attendings and they also help focus on the interplay between science and medicine.

Resident Research

Although there is no formal research requirement, many residents do research, particularly clinical research during their training. Children’s Hospital and Boston Medical Center both have federally funded General Clinical Research Centers (called the Clinical and Translational Study Unit at Children's), and outstanding Clinical Research Center core services, with biostatisticians, epidemiologists, and other personnel to aid in experimental design. Children's is also part of Harvard Catalyst, a consortium of Harvard hospitals and resources dedicated to clinical research. The Harvard Catalyst provides incredible resources for interconnecting investigators with common interests across the Harvard community and has introduced very powerful tools that facilitate clinical research, such as the Shared Health Research Information Network (SHRINE), an interactive database of patients seen at the Harvard hospitals who meet clinical criteria of interest. Catalyst also provides education and training in clinical research, pilot funding, core facilities and many other services. Faculty members

Resident and fellow Research Day
at both Children’s and BMC are eager to help residents with research, and many serve as mentors for research projects. The Academic Development Block provides a time to do small projects or conclude larger ones and the new Academy of Investigation and Academy of Clinical Innovation emphasize research. Both the Department of Medicine at Children’s Hospital, and the hospital sponsor Research Days where residents and fellows can present their work. In addition, 20-30 current or recently graduated BCRP houseofficers typically submit abstracts of research they did during residency to the Pediatric Academic Societies spring meeting each year. Though not all resident research is published, much of it is, and often it is of high quality. Some examples of research done during residency and published during the past 3.5 years follow (resident names are in bold):

2014

Three years ago, ex-senior resident Vijay Sankaran and his mentor Stuart Orkin traced the fetal hemoglobin switch to a repressor, BCL11A, that turns off expression of gamma globin (and HbF), allowing beta globin (and HbA) to switch on. This seminal work, published in Proc Natl Acad Sci USA, Science and Nature, answered one of the most important questions in hematology in the past half century and created very important therapeutic possibilities for treating sickle cell disease and thalassemia. Vijay continued to pursue this and related problems during his residency—working both here at Children’s and across the river in Cambridge, where he is holds a Visiting Scientist position at the Broad Institute of Harvard and MIT. By following up on thalassemic patients with gene deletions that differ only slightly but lead to markedly different levels of fetal hemoglobin, Vijay tracked down the locus within DNA where BCL11A acts (N Engl J Med). And, by following up on an old observation that some patients with trisomy 13 have high fetal hemoglobin levels, he was able to identify two micro-RNAs on chromosome 13 that regulate BCL11A via the Myb gene (Proc Natl Acad Sci USA). More recently, Vijay and his collaborators have shown that sickle cell disease in mice can be cured by silencing BCL11A and reactivating fetal hemoglobin expression (Science) and they have begun the search for small molecules that can cause such silencing and might be effective therapeutic. In other studies, Vijay has discovered that cyclin D3 regulates the size and number of red cells (Genes Dev), and he has found new genes responsible for Diamond-Blackfan anemia (J Clin Invest) and discovered the mechanism underlying that disease (Nat Med). He is embarking on a large scale study of the genetics of hematological disorders and a search to identify natural metabolites that might explain why patients with certain organic acidopathies have high fetal hemoglobins. Vijay is also a great doctor and teacher and was recently honored with an Outstanding Resident Teacher award from the third year Harvard Medical Students. He completed his residency last year and was appointed Assistant Professor of Pediatrics. He has recently completed his clinical fellowship year in hematology/oncology.


2013

- Cheston CC, Flickinger TE, Chisolm MS. Social media use in...
The Medical Perils of Street Youth

Young people who live on the street – commonly known as ‘street youth’ – represent a population at great risk for acquisition of HIV and hepatitis C. Much of this excess risk is due to the high prevalence of intravenous drug use and high-risk sexual behavior in this group. Since 2007, recent chief resident Scott Hadland has worked with researchers in his hometown of Vancouver, Canada, to study risk behaviors and the risk they confer for infectious disease transmission among street youth. Scott’s work has led to 10 publications during his resident years. He focused on patterns of depression among street youth according to the illicit drugs that they use (J Adolesc Health), and also showed that there is an elevated risk for acquiring hepatitis C among youth who report a history of childhood sexual abuse (Prevent Med). As a resident, Scott was twice nominated for the Society of Adolescent Health and Medicine’s New Investigator Award, and was awarded the American Pediatric Association’s Award for Best Abstract by a Resident at the Pediatric Academic Societies Annual Meeting. His research has been featured in The National Post, The Toronto Star, The Vancouver Sun and McLean’s Magazine, and has resulted in on-air interviews on CBC Radio One and Global Television. Here in the BCRP, Scott was recognized by the Boston University Medical Students with a teaching award and continued to teach residents in his role as chief resident. In the years ahead, Scott plans to continue his work with at-risk youth as a fellow in Adolescent Medicine at Boston Children’s Hospital.


• Recher M, Karjalainen-Lindsberg ML, Lindlöf M, Söderlund-


Research Tracks

The BCRP supports both research pathways approved by the American Board of Pediatrics.

Accelerated Research Pathway (ARP)

This pathway is for residents committed to an academic career as a physician-scientist. It allows the resident to complete pediatrics training in two years in exchange for adding an extra year of fellowship. No exam is required. Since almost all fellows training to be physician-scientists do more than three years of fellowship research anyway, this is an attractive pathway.

Integrated Research Pathway (IRP)

This is another new pathway. It is open to those with MD/PhDs or PhD-like research experience. The pathway allows residents to combine 24-months of clinical residency with up to 12-months of research, beginning after the PL-1 year. At least 5-months of the research must be in the PL-3 year.

These pathways are described in detail in the American Board of Pediatrics website.

Eligibility for Research Tracks

Technically, intern applicants cannot be guaranteed acceptance into these pathways before the beginning of their internship since clinical performance and PL-1 in-service exam scores are used to judge a candidate’s suitability for accelerated training. However, almost all residents who wished to pursue one of these pathways over the past decade have been allowed to do so.

Housestaff who wish to pursue these pathways instead of a senior year, must notify Ted Sectish by January 1st of their internship year and demonstrate superior clinical competence and scores on the In Training Examination of the American Board of Pediatrics that predict successful passage of the general pediatrics certifying examination. The Executive Committee oversees the selection process for interested candidates. Decisions are made in November of the intern year.
Approximately four to five slots are available each year. It should be noted that the number of candidates desiring one of these two research tracks almost never exceeds the number of slots.

**Special Tracks**
The BCRP makes every effort to allow residents the freedom to pursue special research pathways that meet their needs. For example, some residents have extended their period of training for family reasons, and a few have left the program for a year to undertake or complete a project.

**The Personal Touch**
The BCRP is a family made up of over 140 residents, program directors, and administrative staff. Many residents have recently moved to Boston. Some with partners and young children and all are working hard to balance their busy professional and personal lives. We value providing a strong support network for our residents, and we strive to give the BCRP community as many opportunities as possible to spend time together outside the hospital.

**Intern Orientation**
New interns participate in a unique 12-day Orientation before their first day of work. This time is used for interns to get to know each other, to explore Boston, to learn their way around the hospitals, and to take care of logistics so that they can hit the ground running.

During Orientation, incoming interns participate in structured modules that highlight a variety of important areas such as communication, professionalism, humanism, individualized learning plans, and procedural competency; complete certification courses in PALS and NRP; get oriented to the wards and emergency departments in which they will soon be working; and perhaps most importantly, enjoy a variety of social activities, including:

- Team-based scavenger hunt
- Traditional New England clambake
- Barbecue at the Larz Anderson Park in Brookline
- Tours of Boston on the famous Duck Boats
- Chief Family Dinners
- Happy Hours
- And more…

**Advisors and Mentorship**
The BCRP strives to provide the best possible educational experience for every resident, to foster personal and professional growth, and to encourage the pursuit of individual passions. Our program prides itself on carefully guiding residents along their chosen career path in order to help them become leaders in clinical care, research, medical education, quality improvement, advocacy, or other areas of their choosing. We take a two-pronged approach, with advising being provided primarily through the five “Chief Families,” and mentorship being accomplished primarily through the four Academies discussed elsewhere.

**Advising:** Each of the Chief Families has between 25-30 residents and is led by a Chief Resident and one or two faculty advisors. Several times a year, residents meet individually with their Chief Family leadership to confidentially discuss their rotation feedback and assessments, progress towards individual personal and professional goals, and any issues they may encounter. The advisors may also provide guidance on career choices and advocate on behalf of the resident when necessary.

**Mentorship:** While mentorship overlaps significantly with advising, the primary focus of mentorship through the Academies is professional development and career planning. Indeed, it is a cornerstone of the Academies. The Faculty Advisors, affiliated faculty members, and Chief Residents in charge of each Academy create numerous opportunities for residents to identify mentors through networking events, career nights, and research-in-progress events, among others. Residents are encouraged to identify mentors that share their interests, or the Academy leadership may assign a mentor at the resident’s request.
Intern Orientation

Getting to know you games

Famous Dr. Vinci waffles

New name tags

New pagers

Practicing procedures

Learning proper technique for completing the New York Times Crossword

Bad breath protection

REALLY bad breath protection

Prouthy Garden picnic

Dinner at the Vinci's

New England Clambake
Housestaff Lounge
The Housestaff Lounge is a newly renovated, casual space dedicated to the residents. It contains workspaces with computers, a printer, a fax machine/scanner; a Keurig coffee machine with free coffee and tea; a full-size refrigerator and microwave; and a 50-inch HD television with surround sound, DVD player, Xbox, and Nintendo Wii. Residents use this room to relax, to gather for informal meetings, and for various lunchtime conferences.

Retreats
House officers participate in multiple retreats throughout the three years of residency. These provide time for resident bonding, reflection on education, and discussion of issues important to the entire residency.

Intern Retreat
All interns participate in an overnight retreat in the fall to relax, reflect, and enjoy each others’ company in a more casual setting after the first three months of residency. It is typically held at one of the faculty members’ summer homes (without the faculty member present, of course). Recently, the interns have spent the night on Cape Ann and Squam Lake.

Fall Housestaff Retreat
Traditionally, this all-day, all-housestaff retreat has involved activities that help all three years of residents get to know each other and develop their professional or clinical skills. A location away from the hospitals is chosen. Fellows and attendings cover the clinical services while residents are at the retreat. Resident input is solicited to plan the topics of discussion, such as curricular changes and how to be an effective teacher on the wards. Team-building activities have included ropes courses, wilderness survival simulations, and the BCRP Olympics.

Spring Housestaff Retreat
The Spring all-day, all-housestaff retreat is also held off the hospital premises. This retreat is typically used as a forum for reflecting on the year, sharing advice about career and financial planning, brainstorming on ways to improve the residency experience, and afterwards, honing the resident’s bowling skills.

Rising Junior Orientation
This retreat is for interns only and also takes place in the spring. Discussions center around the new experiences interns can expect in the junior year, including increased autonomy and resident and medical student teaching.

Rising Senior Orientation
This is a springtime junior-only retreat focused on building skills essential to the role of the senior resident. Usual topics include: leadership and communication skills; principles of medical education and “resident-as-teacher” skills; tips on licensure and career planning; and recertification in NRP and PALS.

Family Friendliness
Parenting as a Resident
The BCRP actively supports residents who are parenting during their training years. As a program, we recognize the difficulties inherent in managing the dual roles of parent and house officer. We are proud to offer a variety of supports to help residents strike their work-family balance with grace and confidence.

Peers Who are Parents. You will find parents of infants, toddlers and school-age children among fellow residents. As a group they socialize and share information about how to strike the right work-family balance.
Intern Retreat

Some work sessions
Some time to hang out
And team building events like the BCRP Olympics and rope courses

Fall Retreat

Hanging out
Beach football
Grilling
Playing Scatagories
Breakfast together

Some work sessions
Some time to hang out

And team building events like the BCRP Olympics and rope courses
• **Maternity and Paternity Leave.** The program offers maternity leave and paternity leave. With advance scheduling up to 12 weeks usually can be accommodated for the former. The time is limited by the training requirements of the American Board of Pediatrics. More time can be taken if the resident extends the period of training to include the extra leave.

• **Flexible Scheduling.** The BCRP has assisted several residents with arranging half or three-quarter time schedules, designed to allow completion of residency at a slower pace over a longer interval. Although we cannot always guarantee flexible scheduling, we try to accommodate such requests to the best of our ability.

• **Supportive Colleagues and Mentors.** House officers returning to work after childbirth report that their colleagues and mentors are supportive during the transition back, including attitudes towards breastfeeding and the short but frequent absences it requires from the wards.

• **Lactation Support.** Both Children’s Hospital and Boston Medical Center have extensive lactation resources, including dedicated RN lactation consultants and multiple comfortable, quiet areas in which mothers can pump in private. Pumps and associated accessories can be purchased from the hospital at a discount.

• **Child Care.** Children’s Hospital has an affiliated day-care center that is available to Categorical track residents (though there is usually a waiting list). There are multiple other day care options in the Longwood Medical Area that are compatible with medical hours. For even more flexibility, some residents choose to hire nannies, found through a variety of channels, including recommendations from current and former residents.

• **Community Offerings for Families.** Boston and the surrounding communities provide a wide array of enjoyable and enriching opportunities for kids, such as playgrounds and parks, the Aquarium, the Children’s Museum, the Science Museum, and numerous day trips outside the city.

• **Schools.** Many of the local school systems, including Brookline and Newton, enjoy nationwide recognition for excellence.

**Office of Fellowship Training**

The Office of Fellowship Training at Boston Children’s Hospital assists both clinical and research fellows (including house officers) in accessing resources and networking at Children’s Hospital and in the Greater Boston area. There is an excellent “Welcome to BCH and Boston” section on their website that lists many useful resources. ([http://www.childrenshospital.org/research-and-innovation/research-administration/office-of-fellowship-training/welcome-to-bch-and-boston](http://www.childrenshospital.org/research-and-innovation/research-administration/office-of-fellowship-training/welcome-to-bch-and-boston)).

**Benefiting the Community**

The BCRP is actively engaged in the Boston community and committed to providing outstanding care to Boston’s children. Both institutions are located near large urban areas with many families living at or below the poverty level. In many ways, our institutions become community hospitals for residents from Roxbury, Dorchester and Mission Hill. The majority of children who live in Boston receive their primary health care from one of our institutions. Boston Medical Center is the largest provider of uncompensated care (Free Care) in Massachusetts and Children’s Hospital’s Primary Care Center (CHPCC) is the largest provider of pediatric primary care to children in the city, with 11,000 patients, 65% from inner city neighborhoods. Several rotations incorporate community experiences and resident engagement with the urban population as part of their curricula, including Adolescent Medicine, Child Development, Emergency Medicine, and the Advocacy curriculum.

Residents often organize and participate in other community efforts outside of the hospital. In the past, residents have raised money for the BMC food pantry during the holiday season, taken part in the annual Rodman Ride bike race, and run in the Boston Marathon as part of organizational fundraising efforts. In addition, several residents have offered testimony during hearings at the State Capitol in support of child health initiatives.

**Community Health and Advocacy Rotation**

The Community Health and Advocacy Rotation is based at Boston Medical Center and is incorporated into the Keystone Quarter during the PL-1 year. The curriculum focuses on screening for and addressing social
determinants of health, building familiarity with resources in Boston to address social determinants, and exploring careers in advocacy at the local, national and global levels. Training in media and legislative advocacy, skill building exercises such as writing op-ed pieces, and experiential learning through a community tour and visits to local institutions such as WIC and housing court complement targeted didactic training in topics such as disability services, family law, health insurance, housing, hunger and nutrition, and immigration services. In addition, residents learn to seamlessly incorporate their advocacy skills into their primary care clinic and emergency rooms shifts during the Keystone Quarter so that advocacy is seen as central to being a Pediatrician rather than separate from clinical duties.

For residents with a special interest in this area, an elective opportunity can be arranged at the Legislative Office of the American Academy of Pediatrics (AAP) in Washington, DC. Residents can also become involved with advocacy through the Boston Children’s Hospital Advocacy Network. BCRP residents also join with pediatric residents from MGH and other pediatric programs in the state in RFDASH (Residents and Fellows Day at the State House) to advocate for policies that benefit children at the state level.

Natalie Stavas and Dan Parry are Passionate About Fighting Childhood Obesity.

Inspired by the patients in their primary care clinics, Drs. Stavas and Parry piloted a Massachusetts-wide campaign to decrease the consumption of sugar-sweetened beverages and reduce obesity. They successfully rallied pediatricians to support House Bill 1697, which aimed to revoke the sales tax exception that existed for soda in our state. In addition, they led the distribution of “No Sugary Drinks” prescription pads to physicians across the state. Their efforts received media coverage from the Boston Globe and the recognition of many policymakers in the Commonwealth.
International Opportunities

**BCRP Global Child Health Initiative**

The goals of the BCRP Global Child Health initiative are to increase knowledge and awareness of global health issues; to provide specialized knowledge, skills and mentorship to residents with career interests in global child health; and to provide high-quality opportunities for meaningful international clinical experiences. The initiative offers exposure to international and refugee patients, as well as faculty working on cutting-edge, grass-roots policy and health service delivery implementation in the developing world. It has three major components:

- Global health teaching curriculum for all BCRP residents.
- Global health electives at supervised, affiliated international sites.
- A four year integrated residency and fellowship in Global Child Health through Boston University or a postgraduate Global Pediatric Fellowship in Health Services Delivery through Boston Children’s Hospital and Partners in Health.

**Global Health Teaching Curriculum**

The BCRP global health teaching curriculum provides didactic and case-based instruction on the fundamentals of pediatric international health, integrated throughout existing noon conferences and resident lectures. During the PL-1 year, additional educational sessions occur during the advocacy section of the 12-week Keystone block. Residents in the Urban Health and Advocacy Track are also exposed to topics in global health through monthly Research, Advocacy and Policy sessions. The curriculum covers topics of current relevance as well core topics such as tuberculosis, HIV, malaria, malnutrition, vitamin and micronutrient deficiencies, parasitic infections, child and infant mortality in the developing world, and management of healthcare systems in resource-poor settings.

**Global Health Seminar Series**

Every month the Global Pediatrics Program hosts a seminar pertaining to child health in low-resource settings.

**Fellows Journal Club and Conference**

The Global Pediatrics Fellowship in Health Service Delivery at Children’s Hospital hosts a monthly journal club and a monthly conference. These sessions are open to interested residents.

**BMC International Health Clinics**

Boston Medical Center has an International Refugee Clinic, Travel Clinic and Tuberculosis Clinic. Residents have the opportunity to rotate through these clinics during their elective time.

*Examining a patient in Haiti*
Global Health Electives with Established Partnerships

Residents have elective time in their second and third years, during which they can pursue clinical rotations at international sites. Our goal is that all residents interested in global health rotations will receive preparation and support to facilitate their participation in elective rotations in resource limited settings that are educational, safe, and responsive to their host communities. Housestaff may arrange rotations or research projects independently, or they may take advantage of several established partnerships. A database of institutional, regional and national grants is available to assist residents with funding. The more established programs are described here. Except for the program in Botswana, these rotations are currently available to BCRP residents only.

**Liberia**

**Program:** Academic Collaborative to Support Medical Education in Liberia  
**Site:** John F. Kennedy Medical Center, Monrovia, Liberia.  
**Minimal Time:** One month  
**Activities:** Co-teaching of Liberian medical students and interns, supervision of US residents, clinical work on the ward, NICU, ER and outpatient clinics.  
**Cost:** In-country costs provided. Resident is responsible for their plane ticket and dinners  
**Language:** No requirement  
**Contact:** Michelle Niescierenko at Boston Children’s Hospital

**Haiti**

**Program:** Partners in Health/ZL  
**Sites:** St Marc, Mirebalais, and Cange Hospitals  
**Minimum Time:** 2 weeks with continued rotations in the future, longer participation preferred.  
**Activities:** Teaching of local nurses, residents and doctors; clinical work on the general pediatrics ward or in the NICU or outpatient clinic; protocol development for common diseases.  
**Cost:** Plane ticket  
**Language:** None required but knowledge of French useful  
**Contact:** Sara Stulac at Partners in Health

**Botswana**

**Program:** Botswana-Harvard Partnership Research Program/Beth Israel Deaconess Hospital  
**Site:** Scottish Livingston Hospital, Molopolole, Botswana, a large (63,000 pop) traditional village located 60 km from the capital city of Gaborone.  
**Minimum Time:** One month.  
**Activities:** Pediatric ward care. Focus is on HIV, but patients have many infectious diseases,
accidents, burns, snakebites and other disorders. Visit needs to be coordinated with the MGH-based pediatric attending, who is there part of the year. Opportunities for teaching and research available.

Cost: Plane ($1500-2000) and housing ($900-1000/month)
Language: No requirement
Contact: Roger Shapiro or Tomer Barak at Beth Israel Deaconess hospital with questions.

Muhimbili National Hospital in Tanzania

Tanzania
Program: Muhimbili University Pediatrics Dept
Site: Muhimbili National Hospital, Dar es Salaam, Tanzania
Minimum Time: 2-4 weeks
Activities: Residents work alongside pediatric faculty, residents and staff in a large department that serves as a referral center for the country. They can choose to work in subspecialty clinics, the acute care ward, general ward, NICU, or the diarrhea ward. They can also focus on research or quality improvement projects, and enhancing education.

Cost: Plane ticket, lodging
Language: No requirement
Contact: Christiana Russ at Boston Children’s Hospital

Indian Health Services
Program: Indian Health Services Pediatric Program
Site: Northern Navajo Medical Center, Shiprock, New Mexico
Minimum Time: 1 month
Activities: The pediatric rotation includes mostly outpatient urgent care and primary care visits. Residents may also observe numerous community-based healthcare initiatives, including school visits. This is a unique opportunity to work with a medically underserved community with a distinctive culture while gaining outpatient primary care and public health perspectives.

Language: No requirement
Contact: Christiana Russ at Boston Children’s Hospital

Other Global Health Electives
Dana-Farber/Children’s Hospital Cancer and Blood Disorders Center Global Health Initiative
The Dana-Farber Cancer Institute and Boston Children’s Hospital established the Global Health Initiative (GHI), which integrates program building, education and research in pediatric cancer and blood disorders in developing countries. Elective rotations at these sites are available, and residents are encouraged to become involved with capacity building and program development. Ongoing initiatives include: (a) an advanced pediatric oncology unit at the Children’s Cancer Hospital in Cairo, Egypt; (b) a newborn screening program for sickle cell disease and a sickle cell disease clinic in Liberia, in...
collaboration with the HEART program, and in Haiti in collaboration with Partners in Health; (c) establishment of cancer registries in El Salvador and Guatemala; (d) pediatric cancer and hematology twinning programs in the Philippines and Georgia, and (e) care and control programs in multiple regions, including Central America and the Dominican Republic, in collaboration with AHOPCA (La Asociacion de Hemato-Oncologia Pediatrica de Centroamerica y Republica Dominicana), a network of pediatric oncologists; in Haiti and Rwanda, in collaboration with Paul Farmer’s program, Partners in Health; and in Ethiopia, in collaboration with the International Network for Cancer Treatment and Research (INCTR). One of our pediatric residents has been actively involved in the development of a retinoblastoma program in the Philippines. Another has worked on intensive care of patients with cancer in Guatemala. Other ex-residents, now fellows, are involved in cancer care and research in multiple countries through the global health fellowship in hematology/oncology described in a separate section. Please contact Dr. Carlos Rodriguez-Galindo or Irini Albanti, GHI Manager, at the Dana-Farber Cancer Institute for more information.

International Family AIDS Program, Dominican Republic

The BCRP is collaborating with a program affiliated with Columbia University that offers a pediatric elective in the Dominican Republic. The International Family AIDS Program clinic is in La Romana (Clinica Familia La Romana) on the Southeastern coast. The population served includes Haitians and Dominicans, with a significant prevalence of HIV. The elective involves both a clinical component and a project or research component. The clinical component consists of outpatient HIV care five mornings a week under the supervision of staff pediatricians and Global Health fellows. The project provides a needed service to the clinic or answers a relevant research question. Residents attend weekly educational conferences and present a case or topic of their own at one conference. They also have the opportunity to participate in patient home visits, Batey outreach, adolescent support groups, and brothel outreach and education. The IFAP Casa International in La Romana provides housing and breakfast for visiting residents and students for a monthly fee. BCRP residents can apply for the elective during the months of September to May for a minimum of one month. Spanish fluency is required. Contact Dr. Lara Antkowiak at the Martha Eliot Health Center (lara.antkowiak@childrens.harvard.edu) for more information.

Fellowships

Boston University’s Fellowship in Global Child Health

While many residents spend some elective time at an international site, the BCRP also recognizes that a smaller number of residents will pursue careers in global child health, and has a unique training opportunity for these residents. In 2009, the BCRP partnered with Boston University’s School of Public Health and Boston Medical Center’s Department of Pediatrics to establish a four-year integrated residency/fellowship for candidates interested in a career in pediatric global health research. For BCRP residents, the fellowship is only open to applicants in the Urban Health and Advocacy Track, with integration beginning after successful completion of the intern year. Core aspects of the fellowship include:

- Master of Science in epidemiology at Boston University’s School of Public Health
- Mentored applied research in child health
- Pediatric residency with global health electives

Fellows work closely with faculty members from Boston University’s Center for Global Health and Development (http://www.bu.edu/cghd/) in applied global health research as well as pursue advance training in epidemiology, biostatistics, research design, monitoring and evaluation through the BU’s School of Public Health.

Boston Children’s Hospital Postgraduate Global Pediatric Fellowship In Health Service Delivery

The Global Pediatrics Program offers a postgraduate fellowship program in global health, in collaboration with Partners in Health (http://www.pih.org/). Fellows combine work at PIH and Ministry of Health Hospitals in Haiti and Rwanda with clinical and course work in Boston. While abroad, fellows work with Rwandan and Haitian colleagues to improve the quality of pediatric services. Fellows share their clinical experience through bedside and didactic teaching, and work with local staff to implement specific programs and projects. Areas of focus for the fellows’ have included pediatric HIV prevention of
vertical HIV transmission, neonatology, oncology, and care of children with chronic and non-communicable disease. This focus on global health service delivery provides critical support to our partner sites in Haiti and Rwanda, and provides fellows with an opportunity to develop skills and experience in clinical care in low resource settings, in medical education, and in program design, management and evaluation. Contact Kim Wilson, Fellowship Director, at Boston Children’s Hospital for more details.

**Fellowship in Global Health Research in Pediatric Hematology/Oncology**

The Global Health Initiative (GHI) in Hematology/Oncology Fellowship Track offers a unique post-residency opportunity for hematology/oncology fellows to train in aspects of global health. Mentored clinical and clinical research training take place in one of the Dana-Farber/Children’s Hospital Cancer and Blood Disorders Center partner institutions in a low- or middle-income country, as well as participating in research projects in health systems, cancer disparities, epidemiology, etc. Currently the sites that are available to fellows include any of the member institutions of AHOPCA (La Asociacion de Hemato-Oncologia Pediatrica de Centroamerica y Republica Dominicana), a pediatric oncology association that has a designated pediatric oncology facility in every country in Central America and the Dominican Republic. In addition, the GHI is collaborating with the Black Lion Hospital in Addis Ababa, Ethiopia and has ongoing research, education and capacity-building activities in Egypt, Sub-Saharan Africa, Southeast Asia, South America and the Caucasus Region. Fellows spend one to three months per year at one of these sites during the second, third and fourth years of their fellowship training. Contact Carlos Rodriguez-Galindo or Irini Albanti, GHI Manager, at the Dana-Farber Cancer Institute for more information.

**Schliesman and Von L. Meyer Travel Funding**

The Schliesman and Von L Meyer Funds are specifically dedicated to fund overseas travel and medical experiences of residents. Approximately 20 residents each year receive about $1,000 each for this purpose.

**Recent Examples of Schliesman Projects that Residents Have Done:**

- Pediatric and Endocrine Practice with Navajo Indians, New Mexico
- Inpatient Pediatric Care Focusing on HIV and TB, Rwanda
- Infectious Disease Clinic and Teaching, Botswana
- Pediatric Hospital Care with Health Frontiers, Laos
- Research on Neonatal Care in the Community, Indonesia
- Providing Pediatric Care in Rural Settings, Ecuador
- Growth and Nutrition Research Project, Guatemala
- Diarrhea Illness Management and Research, Bangladesh
- Patient Advocacy with Doctors for Global Health, El Salvador
- Primary Pediatric Care and Nutrition, Haiti
Global Health Experiences
Recent residents have also completed projects in Uganda, Ecuador, Liberia, Bolivia, South Africa, Argentina, Zambia and Vietnam.

Minority Physician Training

The Boston Combined Residency Program in Pediatrics (BCRP) links the pediatric training programs of Boston Children's Hospital and Boston Medical Center. The strength of Children's Hospital, one of the world's leading pediatric research and training institutions is combined with the passion and commitment of Boston Medical Center's tradition of excellence in clinical research and primary care among disadvantaged populations.

Historically, the BCRP has attracted an extraordinary group of skilled and dedicated pediatricians at the resident, fellow and faculty levels. Given the significant demographic changes in the proportions of racial and ethnic minority citizens, as well as the well-documented racial and ethnic disparities in child health, pediatric leaders in the 21st century must represent all races and backgrounds. Despite a multitude of outstanding minority faculty with expertise in a broad range of areas within pediatric health, the BCRP is strongly committed to the continued development of a well-balanced academic community. In addition, the BCRP recognizes the need for maintaining the consistent presence of such a talented racially and ethnically diverse staff and has, therefore, outlined the following goals regarding minority physician training:

- To shape the professional development of a cadre of minority physicians who will become leaders in all aspects of Pediatrics including patient care, research, medical education, health care policy and child advocacy.
- To increase the number of BCRP housestaff from underrepresented racial and ethnic minority groups while maintaining the current standard of excellence.
- To enhance cohesion among trainees and faculty in the BCRP community.

Welcome Dinners for Applicants

On the evenings before interviews, minority applicants are invited for an informal dinner to meet housestaff, fellows, and faculty. Applicants have rated these dinners very highly because they provide the opportunity to discuss a wide range of issues with current members of the BCRP community in a relaxed atmosphere.

Minority Faculty

- Adolphe, Soukaina MD, BMC, Ambulatory Pediatrics
- Alvarez, Norberto MD, BCH, Neurology
- Ballenger, Johnye MD, BCH, General Pediatrics
- Barfield, Wanda MD, BMC, Newborn Medicine
- Bernier, Angelina MD, BMC, Pediatric Endocrinology
- Betances, JoseAlberto MD, BMC, Primary Care
- Bezler, Natalie Zimmerman, MD, BCH, Hematology/Oncology
- Bonilla, Francisco MD, PhD, BCH, Allergy/Immunology
- Borten, M. Morris MD, BCH, Primary Care
- Boynton-Jarrett, Renee MD, ScD, BMC, General Pediatrics
- Camargo, Fernando, PhD, Stem Cell Program, BCH
- Castro, Ilse, MD, BMC, Pediatric Radiology
- Corfas, Gabriel PhD, BCH, Neuroscience
- Corzo, Deya MD, BCH, Genetics
- Daniel, Jessica Henderson PhD, ABPP, BCH, Psychiatry/Psychology
- Davis, Carmon J. MD, MPH, BCH, Primary Care
- Del Nideo, Pedro J. MD, BCH, Chief, Cardiac Surgery
- Drubach, Laura A. MD, BCH, Radiology
- Epee-Bounya, Alexandra A. MD, BCH, Emergency Medicine
- Estrada, Carlos R. Jr MD, BCH, Surgery
- Figueira, Marisol MD, BMC, Infectious Diseases
- Flores, Alejandro F. MD, BCH, Gastroenterology
- Freundlich, Charise, MD, BMC, Emergency Medicine
- Friedrick-Medina, Paola M. MD, BCH, Hematology/Oncology
- Gilson, Diana V. MD, MPH, BCH, Newborn Medicine
- Fynn-Thompson, Francis MD, BCH, Cardiac Surgery
- Gonzalez-Heydrich, Joseph M. MD, BCH, Psychiatry/Psychology
- Gutierrez, Alejandro MD, BCH, Hematology/Oncology
- Gutierrez, Camilo MD, BMC, Pediatric Emergency Dept
- Harper, Marvin B. MD, BCH, Infectious Diseases
- Holder-Niles, Faye, MD, MPH, BCH, Primary Care
- Ibla, Juan C. MD, BCH, Anesthesiology
• Jarrett, Delma, MD, BCH, Radiology
• Joseph, Luc F. MD, BCH, Primary Care
• Korndorfer, Sergio R.M. MD, BCH, Psychiatry/Psychology
• LeClair, Elaine G. PhD, BCH, Psychiatry/Psychology
• Lee, Michelle A. MD, PhD, BCH, Hematology/Oncology
• Lopez, Carlos G. MD, BCH, Psychiatry/Psychology
• Martin, Camilla R. MD, BCH/Beth Israel Deaconess, Newborn Medicine
• McAlmon, Karen R. MD, Winchester Hospital, Newborn Med
• Melendez, Elliott MD, BCH, Emergency Medicine
• Morera, Claudio MD, BMC, Gastroenterology
• Mustafa-Kutana, Suleiman MD, BMC, Endocrinology
• Navedo-Rivera, Andres T. MD, BCH, Anesthesiology
• Nethersole, Shari MD, BCH, General Pediatrics, Community Health
• Nurko, Samuel MD, BCH, Pediatric Gastroenterology
• Obeng, Esther, MD, PhD, BCH, Hematology/Oncology
• Ordonez, Claudia L. MD, BCH, Respiratory Diseases
• Peacock-Chambers, Elizabeth, MD, BMC, General Pediatrics
• Perez-Rosello, Jeanette M. MD, BCH, Radiology
• Pierre-Joseph, Natalie MD, BMC, Adolescent Medicine
• Poe, Dennis S. MD, BCH, Otolaryngology
• Poussaint, Tina Y. MD, BCH, Neuro-Radiology
• Prudent, Nicole MD, BMC, Primary Care
• Pursley, DeWayne M. MD, BCH/Beth Israel Deaconess Med. Ctr., Newborn Medicine
• Ramirez-Schrempf, Daniela MD, BMC, East Boston Neighborhood Health Center
• Redd, Sharon L. MD, BCH, Anesthesiology
• Rey-Casserly, Celiane M. MD, BCH, Psychiatry/Psychology
• Rodriguez-Galindo, Carlos, BCH/DFCI, Hematology/Oncology
• Simmons, Esau M., MD, BCH, Primary Care
• Smith, Vincent C. MD, MPH, BCH, Neonatology, Health Services Research
• Taylor, George M. MD, BCH, Chief, Radiology
• Testa, Silvia Z. MD, BCH, Newborn Medicine
• Tubman, Venee MD, BCH, Hematology/Oncology
• Ward, Valerie L. MD, BCH, Radiology
• Wilson, Celeste R. MD, BCH, General Pediatrics, Child Protection Program, Center for Adolescent Substance Abuse Research

Contacts
For more information about the BCRP Minority Physician Training Program or any of our programs, please contact:

Jose Alberto Betances, MD
Ambulatory Pediatrics
Yawkey Ambulatory Care Center,
850 Harrison Avenue-5th Floor, Boston, MA 02118.
Phone: (617)414-5946.
Email: josealberto.betances@bmc.org

Celeste Wilson, MD
Associate Director of Internship Selection
Assistant Professor of Pediatrics, Division of General Pediatrics, Boston Children’s Hospital,
300 Longwood Ave., Boston, MA 02115
Phone: (617)355-6369
E-mail: celeste.wilson@childrens.harvard.edu

Affiliated Resources for Minority Residents
Office of Minority Affairs, Boston University Medical School
715 Albany Street, A-407, Boston, MA 02118.
Phone: (617)638-4163.
Fax: (617)638-4433.
Contact: Rafael Ortega

Office of Student Affairs, Boston University Medical School
72 East Concord St, Rm A-208, Boston, MA 02118
Phone: (617) 638-442
Fax: (617) 638-4491
Contact: Catherine Bunker

Minority Recruitment Program, Boston Medical Center
72 East Concord Street, A-210, Boston, MA 02118
Phone: (617) 638-9559
E-mail: justin.mccummings@bmc.org
Contact: Justin McCummings, MEd, Manager

Visiting Clerkship Program, Harvard Medical School
164 Longwood Avenue, 2nd Floor, Boston, MA 02115
Phone: (617) 432-4422
Fax: (617) 432-3834
Contact: Jo Cole, Project Coordinator

Office for Diversity and Community Partnership Harvard Medical School
Gordon Hall, Room 151
25 Shattuck Street, Boston, MA 02115-5818
Phone: (617) 432-1037

Minority Biomedical Scientists of Harvard, Division of Medical Sciences, Harvard Medical School
260 Longwood Ave, Boston, MA 02115.
Phone: (617) 432-1342 or (617) 432-4980
Fax: (617) 432-2644.
E-mail: shurp@hms.harvard.edu
Contact: Deborah Milstein
Salaries and Benefits

Residency appointments are for one-year but house officers are accepted with the expectation that they will complete the full course of training needed for board certification. Depending on track, residents receive their salary and benefits from Children’s Hospital or Boston Medical Center. Salaries and benefits are not identical, but the program directors continually review the benefits packages to be sure they are as comparable as possible.

Salaries

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<tr>
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</thead>
<tbody>
<tr>
<td>PL-1 $59,717</td>
<td>$58,260</td>
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<tr>
<td>PL-2 $62,064</td>
<td>$60,550</td>
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<tr>
<td>PL-3 $64,760</td>
<td>$63,180</td>
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</table>

*New salaries not determined yet

Benefits (Both tracks unless otherwise noted)

Insurance
• Professional liability (malpractice) insurance
• Life insurance
• Long-term disability insurance
• Short-term disability insurance (Urban Health and Advocacy Track)
• Business travel accident insurance
• Subsidized health insurance, including spouse and children
• Subsidized dental insurance
• HIV supplemental benefit plan

Other Employment Benefits
• Vacation (4 weeks)
• Leave of absence: medical, family medical or child care/adoption, bereavement
• Child Care Center (Categorical track, subsidized, waiting list)
• Discounted parking in hospital lots with shuttle bus service
• Free night and weekend parking in patient parking garage
• Discounted public transportation (MBTA) pass
• Voluntary tax-deferred annuity and investment (403b) plan
• Lease Guarantee Program (Categorical Track): Children’s Hospital guarantees payment of security deposit and/or advance payment of last month’s rent if required by landlord. This program is administered by Human Resources. For questions about the program contact the HR Service Center at (617) 355-7780 or email HRESC@childrens.harvard.edu.
• Taxi Voucher Program (both tracks)

Residency Benefits
• On call accommodations, including $10 for dinner when on an overnight shift plus $10 for lunch and $10 for dinner when on a 24 + 4 shift
• Two hospital (BCH & BMC) and two medical school (Harvard & BU) appointments
• Department pays for USMLE III ($780)
• Department pays 50% of Pediatric Board Certifying Exam fee
• Department pays American Academy of Pediatrics dues
• Professional Education Allowance $450 per year for PL-1 and PL-2 residents and $550 per year for the PL-3 residents (Urban Health and Advocacy track)
• Free BLS training for all housestaff
• Free PALS, NRP training courses during orientation and free refresher courses during senior orientation
• Salary payment during intern orientation
• Limited license application fee (Urban Health and Advocacy Track)
• Five-day break between PL-1 and PL-2 years
• Flex spending account for child and dependent care ($5,000) and out of pocket medical expenses ($2,000)
• Office of Clinician Support for work-related or personal problems
• Reimbursement of $500 to attending a medical meeting once during residency (an additional $500, if presenting)
Social Benefits

- Full day fall and spring retreat
- Intern overnight retreat in September
- Full day junior and senior orientation
- Faculty dinners
- Winter Formal (dinner-dance)
- House staff show
- House staff auction
- Children’s Hospital and Boston Medical Center Holiday Parties
- Use of Harvard University and Harvard Medical School athletic facilities

Funding Sources for Academic Pursuits

- Schliesman 3rd World Awards (6-8/yr) ($700-$1,500/Award)
- Von L Meyer Travel Awards (12-13/yr) ($700/Award)
- Lovejoy Research Awards (5-8/yr) ($2,000-$6,000/Award)
- Alpert Research Awards (2-3/yr) ($2,000/Award)
- Paid travel to 1 meeting in senior year ($500/resident)

Child Care Center

The Children’s Hospital Child Care Center provides high quality childcare for children of hospital employees and staff, including Categorical residents. They accept children three months through five years without regard to race, creed, cultural heritage or religion. They offer a safe, supportive environment that fosters self-esteem, growth and cultural diversity.

The Center is located at 21 Autumn Street, just a short walk from Children’s Hospital. It is open year round on weekdays from 6:30 AM to 6:00 PM. The Center is closed on weekends and hospital recognized holidays. The center can accommodate 42 children, but there is nearly always a waiting list. Reduced tuition rates are available based on gross family income.

For more information about the program, or for a tour, please call the Center at (617) 355-6006.

Office of Fellowship Training

Children’s Hospital maintains an Office of Fellowship Training, run by Jordan Kreidberg and Lu-Ann Pozzi, which serves both clinical and research fellows and offers a multitude of services. Examples include: conferences and seminars on topics related to career, family, leadership, mentoring and funding; clinical and basic science discussion groups; and journal clubs, social events, group dinners, and a research day poster session. They also have programs devoted to getting settled in the Boston area that address topics such as: housing, finances (Boston on a Budget), transportation, childcare, family, family activities, sports and fitness, and arts and entertainment. And, there are important sections on credentialing, moonlighting, and preparing a Harvard formatted CV on their website. There is also a fellow-to-fellow forum, including a list of housing opportunities.

Cost of Living

Boston is relatively expensive, though less so than many people imagine. The table below compares the cost of living in different US cities in 2013 based on a hypothetical family income of $100,000. Comparatively, Boston is similar to Seattle, Houston, New Haven, Los Angeles, Dallas and Baltimore, less than New York, Washington, Chicago, Palo Alto, and San Francisco, and more than Philadelphia, Denver and Cincinnati. BCRP salaries, which are higher than average, and the extensive benefit package make the relative costs even lower. In addition, Boston Children's Hospital is only 4 blocks from the elegant suburb of Brookline, with one of the best school systems in the Boston area, and the hospital is very near two subway lines that serve the downtown and suburban neighborhoods. So residents can live in high quality communities without the expense of a car (or extra car) to get to work. In our experience, the cost of living is only restrictive for couples with multiple children and one salary, particularly if there are extra expenses for schooling or child care or loan repayments. We are happy to connect applicants who wish to explore cost of living with current or recent past residents in similar situations.
<table>
<thead>
<tr>
<th>City</th>
<th>Comparative Living Costs 2013</th>
<th>Percent Difference</th>
<th>Pediatric Residency</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York, NY</td>
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<td>Columbia, Cornell, Mt Sinai</td>
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<td>Children’s National</td>
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<td>Oakland Children’s</td>
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<td>UCLA</td>
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<td>Brookline, MA</td>
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<td>Houston, TX</td>
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Data from CityRating.com
With Colleagues

Winter Fling
Each winter, the House Staff Association organizes a formal dinner and dance for residents and significant others, as well as invited faculty. All residents are covered from hospital responsibilities during this event.

Housestaff Auction
The House Staff Association organizes an auction every year in which people donate anything from cooking lessons, to a weekend at a summer home, Red Sox and Patriots tickets, or a new Vespa. All proceeds go to the housestaff association.

The Show
The BCRP houseofficers produce an annual show, a comedy “spoof” of the faculty and the vagaries of residency. The show is a long tradition and provides an opportunity for housestaff to showcase their remarkable singing, dancing, instrumental, organizational and comedic talents (or lack thereof).

Theme Dinners
Subsets of the house-staff organize dinners for each other several times a year around food themes or special days, such as European, African, Indian or Chinese New Year.

Faculty Dinners
Faculty recommended by the housestaff give small dinners for 8-20 residents in their homes throughout the year.

Chief Rounds
The chief residents host monthly gatherings at various locations around the city for residents to relax, unwind and enjoy each other's company.

Tox Rounds
The House Staff Association sponsors frequent evening get-togethers at restaurants and bars around Boston.

Sports
Many BCRP residents participate in organized sports. There are BCRP softball, basketball, and soccer teams in leagues throughout Boston, and as shown in the box above, some are winning titles! Other residents take advantage of hiking and biking trails in Boston and the region or have memberships in local gyms. Harvard University and Harvard Medical School athletic facilities are available to residents for a small fee. The medical school has a gymnasium, squash courts, extensive exercise equipment and an outdoor tennis court.

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Thyroid Storm, YMCA League Champions

Thyroid Storm, an intramural basketball team composed of residents, former residents, husbands of residents, fellows, and attendings. Winners of the 2009 West Newton YMCA League Championship.
Having Fun Together

Winter Fling

Winter Fling Dinner

BCRP Engagement Party

Italian Night

Oktoberfest

Chicago Night

India Night

Chinese Night
Having Fun Together

Halloween Party

Apple Picking Weekend

Ice Skating Party

Ice Cream Party

Chicken Pox

Dessert Contest

Febrile Seizure
Having Fun Together

Housestaff Show

Residents Wailing on Karaoke Night

Housestaff-Faculty Chorale Caroling

Intern Trip to Puerto Rico

Beef Fest and Mustache Contest

Bowling at Spring Retreat

Two of Many Tox Rounds
Boston

Boston is a medical center like no other, with three major medical schools and about 27 hospitals. Immensely diverse and vibrant, Boston is a city of some twenty neighborhoods with Cambridge and Brookline as bordering communities. Persons of color comprise over 40% of the city’s population and over one-third of all students enrolled in Boston Public Schools speak a language other than English at home.

Transportation

Boston is blessed with excellent public transportation. The MBTA subway system (or just "the T") extends throughout Boston, most of Brookline and Cambridge, parts of Newton, and to near north and south shore suburbs. More distant towns are served by commuter rail. The Longwood Medical area is centered within 2-3 blocks of two different Green line routes. There is also an extensive bus system, including a shuttle bus from Harvard University to the Medical School. Parking is expensive in the Longwood area, but residents who drive can park in cheaper outlying lots and use Children’s shuttle buses. Residents can park in the patient lot across from Children’s for free at nights (6 pm to 10 am) and on weekends. Residents who leave the hospital late at night can also obtain free taxi vouchers. Residents who enroll in the Hospital’s T-Pass Program receive a 40% discount on monthly MBTA passes. For those who park in more distant lots, the hospital provides a free shuttle service. There is also a free shuttle (M2 Shuttle) from the Longwood Medical Area to Harvard Square in Cambridge. Residents who do not have their own cars can obtain Zipcars for occasional use. In addition, Children’s Hospital provides a free bike cage in the Patient/Family Garage for employees who cycle to work.

History

Boston was founded in 1630 and is central to American history. History buffs can trek the Freedom Trail, which connects many historically important sites, from the Old State House, where the Declaration of Independence was first read, to Paul Revere’s House to the USS Constitution ("Old Ironsides"). Sites of pivotal battles at Bunker Hill, and in Lexington and Concord, are also national monuments and nearly every town has a historical society. Old Sturbridge Village is an authentic recreation of a colonial village, with historic housing and costumed inhabitants that is located in Sturbridge, an hour west of Boston. Plimoth Plantation is a similar recreation of the original Plymouth Colony just south of Boston. And touryst Salem, home of the infamous witch trials, lies to the north.

The Old North Bridge in Concord.
Site of the 'shot heard 'round the world
Arts and Culture

Boston is a cultural Mecca. The Boston Symphony is world-renowned, as is the Boston Pops, but there are several other professional symphonies and innumerable civic and college orchestras. In fact, the medical area has its own orchestra, the Longwood Symphony, composed mostly of physicians, that is very high quality. There are also over 100 amateur choral groups, including many outstanding ones: the Cantata Singers, the Boston Cecelia and the Handel and Hayden Society to name just three. The Museum of Fine Arts and the Isabella Stuart Gardner Museum are world-class fine art museums and are only a 3-block walk from Children's Hospital. The Institute of Contemporary Art and the Fogg Art Museum at Harvard are two others of note. The Museum of Science and the Harvard Museum of Natural History and the John F. Kennedy Library and Museum are also outstanding. The Boston Lyric Opera highlights a growing opera scene, and the Boston Ballet is one of the country's best. There are numerous theater companies including the American Repertory Theater, The Huntington Theater Company and the Lyric Stage of Boston. Plus, Boston is a frequent venue for pre-Broadway tryouts and touring national companies.

Sports

Boston is a great sports town. The Red Sox, Celtics, Bruins and Patriots have been outstanding in recent years. The Revolution (soccer) are less impressive but usually competitive. Fenway Park is only a 10-minute walk from the hospital (~5 blocks) and the BankNorth Garden, where the Celtics and Bruins play, is a short subway ride. The Patriots and Revolution play in Foxboro, MA, which is about 20 miles south of the city.

For those who prefer participatory sports, the Harvard University Athletic Facilities and Harvard Medical School Athletic Facilities are available for a small fee. Harvard University offers facilities for indoor and outdoor tennis, swimming and diving, ice skating, jogging, squash, basketball, baseball, field hockey, lacrosse, rugby, volleyball, rowing, and sailing, plus others, and extensive exercise and weight training. The Medical School has a gymnasium, squash courts, cardiovascular and strength training equipment and an outdoor tennis court. Groups like the Boston Ski and Sports Club organize year round sports leagues, as well as sporting trips.

Boston is a great running and biking city. There are numerous Bikeways, particularly along the Charles River and through the ‘Emerald Necklace’ string of parks, which lies just 3 blocks from the Longwood area. The same routes are popular for running. For serious runners, the famous Boston Marathon occurs each spring on Patriots Day, which is a local holiday, allowing those who wish to run, to participate. Many housestaff and faculty do.

Golfers have many opportunities in the Boston area. There are 102 18-hole public courses within an hour of Boston including many award winning courses, such as Pinehills. 

Bob Vinci and BCRP residents with the Stanley Cup
in Plymouth, Red Tail in Devens, Shaker Hills in the town of Harvard, and George Wright in Hyde Park, a Boston Municipal course designed by Donald Ross.

Housing and Schools

Housing is relatively expensive in Boston, roughly equivalent to Seattle, though less than New York City, Washington, DC, or the major cities in California. To compensate, the BCRP offers higher than average salaries. In addition, Children's Hospital offers a Lease Guarantee program. If a landlord requires advance payment of the last month’s rent and/or a security deposit, Children’s Hospital will guarantee payment to the landlord. Real estate information is available from a number of sources including the Boston Globe, which also publishes a useful rental search engine. Another good source for rental housing is Rental Beast. Other useful sources include the Harvard Housing Office and Craig’s List and the extensive information on Housing and other topics on the website of the BCH Office of Fellowship Training.

Boston and Cambridge schools are variable but the schools in Brookline, Newton and many other suburban communities are outstanding. The Greatschools website contains considerable information about individual schools.

Kids

Boston is a great city for kids because there are so many things to see and do in the city and nearby, and because the transportation system is safe and extensive. The Children’s Museum and the Museum of Science are each among the best in the country. The nearly free ($1 per year for kids) Community Boating Program is also outstanding and is an incredible bargain. It offers sailing, windsurfing and kayaking on the Charles (lessons included). A good list of activities for kids can be found at Fairly Odd Mother, Family Days Out, Family Friendly Boston, and at Boston Central. The latter site also contains lots of useful information about Boston suburban communities.

Children’s Hospital has its own Child Care Center and there is a Bright Horizons Family Center at the nearby Landmark Center that is available to employees of Harvard Medical School and the Longwood Area hospitals. Kathleen Greer Associates (KGA, Inc) is Children’s Employee Assistance and Information Program. They will help residents find childcare services. The Longwood Medical and Academic area (LMA) Family Childcare Network (FCCN) also matches LMA employees with family child care providers.

For grown-up kids, the Boston Event Guide is a collection of local events for those nights off. The Mass Vacations website contains scads of useful information about the region and things to do.

Restaurants and Night Life

Boston is a world-renowned center for ideas and learning. Some 65 colleges, universities and other institutions of higher education attract more than 200,000 students. No other major city has such a high proportion of students. Their energy invigorates the city’s restaurant and nightlife, from club hopping on Lansdowne Street to the live music scene in the cafes and coffeehouses. Live music includes Latin, jazz, blues, gospel, folk and classical. Boston is a great restaurant town. There are many outstanding restaurants and enormous variety. The restaurant reviews in the Boston Globe and Zagats are particularly useful.
Downtown Boston is a peninsula, surrounded by water on three sides: the harbor on the east and north, and the Charles River on the west. Unlike many cities, much of the waterfront is recreational space. The harbor offers boating of all kinds, fishing, and a number of community beaches. There is a Harborwalk with many parks and other venues. The Harbor Islands are part of the National Park system and are accessible by ferry for day trips and picnicking. The Charles River side is even more scenic, with a 17-mile Esplanade along the shore, the Hatch Shell for summer concerts, the famous Duck Boat Tours and a Community Boating Program that allows individuals or families to sail any of a fleet of 113 boats (or kayaks or wind surfers) in the Charles River Basin for a remarkably low fee and that provides children with instruction and all-summer boating for $1. Every July 4th, the Esplanade is packed with crowds for a spectacular Boston Pops concert and fireworks show. The Charles River is also known for its rowing and sculling. The famous Head of the Charles regatta, the world’s largest 2-day rowing event, is held every year in October.
district and includes the Theater District and many of the best restaurants. Bay Village is a charming historic part of the South End. The Harbor area is also newly renovated. Many wharves have been recycled as high-end condominiums. Chinatown is Boston’s center for the Asian community. The Fenway area, which is closest to the hospitals and includes Fenway Ball Park, has a particularly high concentration of student housing, cultural organizations and parkland.

Charlestown, Brighton, Allston, South Boston, East Boston, Roxbury, Dorchester, Mattapan, Jamaica Plain, West Roxbury, Hyde Park and Roslindale are other Boston neighborhoods. Some housestaff have recently purchased homes in parts of Jamaica Plain, West Roxbury and Dedham, which are reasonably close to the Longwood Medical Area.

Brookline is a very high quality suburb that begins just 3 blocks west of the Longwood Medical Area. It has superb schools and shops and multiple subway lines. Although homes in Brookline are extraordinarily expensive, condominiums and apartments are more reasonably priced, and many interns and residents live there.

Cambridge lies just across the Charles River from Boston and is home to Harvard University and MIT. Many housestaff enjoy the intellectual ferment of Cambridge and live in the residential areas near Harvard Square. There is a regular shuttle bus from Harvard Square to Harvard Medical School and good subway connections.

**Suburban Communities**

Greater Boston is actually a conglomerate of over 100 small to medium-sized towns and villages, most of which were incorporated in the 17th and 18th centuries. As such it differs greatly from the more homogeneous towns in many other parts of the country, because each of the Greater Boston communities has its own character,

government and school system. The range of variation is quite remarkable. Marblehead is centered on sailing, Lincoln and Hamilton on horseback riding, Lexington and Concord on colonial history, and so on.

**Within Massachusetts**

**Beaches**

The Massachusetts shoreline is dotted with beaches, some, like Revere Beach, even serviced by the MBTA. Beaches on the outer arm of the Cape and north of the Cape tend to have colder water than beaches on the south coast of the Cape, on Martha’s Vineyard and Nantucket, and lining Long Island Sound, which are brushed by fringes of the Gulf Stream. It’s difficult to choose the Perfect Beach because tastes and uses vary, but we recommend Horseneck Beach in Westport, MA, near the Massachusetts-Rhode Island border. This 2.5-
mile beach features beautiful dunes, warm(ish) water and adequate parking.

The Cape and Islands
Cape Cod is Boston’s summer vacation spot. It offers a wide variety of attractions. From quaint, historic old towns like Sandwich, founded in 1638, or charming, gray-shingled Chatham, to the Cape Cod National Seashore, with its 40 miles of ocean beaches, dunes, salt marshes and pine barrens, to free-living, freethinking Provincetown at the tip of the Cape. There is a ferry to Provincetown from Boston.

Nantucket and Martha’s Vineyard are reached by ferry from Woods Hole or Hyannis on the Cape. Nantucket Town is historic and charming, with cobblestone streets and 18th century homes. Outside the town one finds an otherworldly landscape of ponds, thickets, moors and heath. There are 80 miles of gorgeous beaches, great biking trails and the village of Siaconset (’Sconset) with its privet hedges and rose-covered trellises. Martha’s Vineyard is more varied and more Victorian, but also charming.

Rockport and Cape Ann
Cape Ann, on the North Shore of Boston, extends from the classic fishing port of Gloucester around to the quaint English-like village of Annisquam. It includes Rockport, a charming artist’s colony, and the bizarre Hammond Castle.

Marblehead
Lying between Salem and Cape Ann, Marblehead was one of the earliest and richest settlements in America. This charming early Colonial era town with narrow streets has over 300 pre-Revolutionary War homes and overlooks a spectacular harbor filled with boats. Called the Yachting Capital of America, Marblehead was the birthplace of the American Navy and retains its sailing focus.

Berkshires and Tanglewood
The Berkshires refers to the area around Lenox and Stockbridge in the western portion of Massachusetts. It is a region of green hills, quaint New England villages, the Norman Rockwell Museum, and Tanglewood, the summer home of the Boston Symphony Orchestra.

Williamstown
A beautiful New England town in the mountainous heart of the northern Berkshires, Williamstown is home to two extraordinary art museums—the Sterling and Francine Clark Art Institute and the Williams College Museum of Art—and the renowned Williamstown Theatre Festival, arguably America’s premier summer theater. The exceptional collection of impressionist paintings alone makes the Clark worth a visit.

Amusement Parks
Canobie Lake Park lies just over the New Hampshire border and is a beautiful, old-time (110-years old), family-oriented park that is especially appropriate for preschoolers to preteens. Lake Compounce in Bristol, CT is another excellent family-oriented park. Six Flags Amusement Park is the big-coaster-type park, near Springfield, MA, that is more oriented to teens and adults. Six Flags also has an excellent water park, but the closest big water parks are Water Country in Portsmouth, NH and

Marblehead harbor
Mini-Dodgem cars at Canobie Lake Park

One of 36 Renoir’s at the Clark Art Institute

Berkshires and Tanglewood

Williamstown
New England Getaways

One of Boston’s gifts is its proximity to great natural beauty. Right in the city is the famous ring of connected parks called the Emerald Necklace, which includes the Arnold Arboretum. A short drive will get you a relaxing weekend in the Berkshire Mountains of Western Massachusetts, or to hiking and biking in the White Mountains of New Hampshire. A free day from the hospital could mean escaping to scenic Vermont, or to miles of rugged coastline in Maine or to the beaches of Cape Cod. Take a ferry ride to the islands of Martha’s Vineyard or Nantucket. And, New York City is only four-hour drive from Boston. The Go New England website is a good place to start looking.

Newport

Newport is both a historic town with more 17th and 18th century homes than any other place in the country, and the fabled summering place of the fabulously wealthy during the Gilded Age at the end of the 19th century. The mansions, like the Vanderbilt’s opulent ‘The Breakers’ or ‘Rosecliff’, of Great Gatsby fame, are worth the trip, as is the Ocean Drive along Newport’s spectacular rocky shore.

Mystic Seaport

Site of shipbuilding since the 17th century, tiny Mystic, CT contains Mystic Seaport, the country’s premier maritime museum. There is also an aquarium and, nearby, two of the world’s largest casinos: Foxwoods and Mohegan Sun.

Maine Coast

Maine is famous for it's pinewoods, rugged, rocky shore, and lobsters. Southern Maine is more accessible and also beautiful, but ‘Downeast’ Maine, north of Portland, is even more so, particularly the areas around Boothbay Harbor, Camden, Blue Hill and Bar Harbor. Bar Harbor is located on Mt Desert Island, which also houses Acadia National Park, one of the most popular national parks in the US. Acadia has the highest mountains on the ocean north of Rio de Janeiro and the only fiord in the Americas. The scenery is spectacular and is amplified by an extraordinary variety of outdoor activities (hiking, biking, rock climbing, canoeing, sea kayaking, sailing, deep sea fishing, whale watching), along with outstanding restaurants, art galleries and opportunities for antiquing.

Lakes

There are many beautiful lakes in New England. Indeed many in northern Maine are wilderness lakes, only accessible by floatplane or logging road. Nearer Boston, Lake Winnipesaukee in mid-New Hampshire is a recreational paradise, especially along its western shore. The Squam Lakes, just south of the White Mountains, depicted in the movie "On Golden Pond", are more peaceful. Sebago Lake in southern Maine is also a popular resort area.
Outdoors Activities

**Hiking**

The hiking in New England is some of the best anywhere. The Appalachian Train extends through Massachusetts, Vermont and New Hampshire, terminating at Mt Katahdin in Maine. The White Mountains in New Hampshire are among the very best with 48 peaks above 4000 ft and many dozens of hikes. Some of these are described at Hike the Whites. The Appalachian Mountain Club, GORP and Trails.com are also excellent resources. Acadia National Park is another extraordinary place for hiking. The 120 miles of hiking trails were mostly built in the early 20th century and vary from gentle woodland and oceanside walks to exhilarating cliff climbs along ledges assisted by iron ladders and steps cut into the rocks. Mt Monadnock is another excellent spot for hiking. The solitary mountain is located just over the Massachusetts-New Hampshire border, about an hour from Boston, and has excellent views. The surrounding region is charming and contains numerous prototypical New England villages. For kids, the 70 ft high, quarter mile long Purgatory Chasm in Sutton, MA, offers rock caves and many fun climbing challenges.

**Biking**

Biking is also excellent in New England, both mountain biking and trail riding, including numerous rides in the Boston area. Acadia National Park has 50 miles of beautiful, fine gravel carriage roads, which wind among the lakes and mountains, with fabulous views and some exciting ups and downs. They were built at great expense by John D. Rockefeller, Jr. between 1913 and 1940, and are now used for biking and horseback riding (no motor vehicles allowed). The trails are listed in the Top 10 biking trails in the US. On Cape Cod, the 22-mile Cape Cod Rail Trail is newly refurbished. It extends from Dennis to Wellfleet along ponds, salt marsh and cranberry bogs. In Rhode Island, the 14.5-mile, paved East Bay Bike Path hugs the coast from Providence to Bristol, passing a wildlife refuge, salt- and freshwater marshes and an open panorama of Narragansett Bay. For mountain bikers, Sunday River Ski Resort in Maine offers weekend lift service to 25 trails covering over 20 miles of terrain.

**Ziplines**

There are numerous opportunities for zip lining in New England. For adrenaline junkies, some lines are more than a half mile long and 200 ft in the air. Others involve tours combining multiple zip lines, sky bridges, rappels and other challenges.
Canoeing and Kayaking

In the Boston area there is very enjoyable canoeing on the Charles River and on the Concord-Sudbury-Assabet Rivers. The latter offers an opportunity to paddle under the historic Old North Bridge and into the Great Meadows National Wildlife Refuge beyond. For those who desire more adventurous canoeing or kayaking, the New England Division of the American Canoeing Association offers cruises and instruction and times of recreational water releases from dams. The enormous numbers of lakes in the northern Maine Wilderness offer exceptional opportunities for extended fishing, camping and canoeing trips. One of the most famous is the trip down the Allagash Wilderness Waterway. For something more casual on a summer day, Farmington River Tubing in New Hampshire provides a cooling 2.5-mile tube ride down the Farmington River and a bus ride back to the launch point.

Skiing and Boarding

New England has 68 downhill ski areas, from small family run operations to giant destination resorts. The snow conditions are less predictably excellent than in the West, but the resorts are more accessible to those wanting day trips. The Blue Hills is a small area just south of the city and offers night skiing. Larger areas within 1 to 2 hrs distances include Waterville Valley, Sunapee and Loon in New Hampshire. The largest and most popular areas, like Killington, Stratton, Sugarbush and Stowe in Vermont; Cannon and Wildcat in New Hampshire; and Sunday River in Maine are 2-3 hours driving distance. Sugarloaf, a terrific mountain in Maine, is even a bit further. Virtually all New England ski areas also cater to snow boarders.

For cross-country skiing, it’s hard to beat the trail system in Jackson, NH, which is also about 2-3 hrs away. Imagine a whole New England Village dedicated to Nordic skiing, with a white-steepled church, covered bridges, rivers with cascading waterfalls, sundry eateries, charming country inns and 100 miles of cross country ski trails. Its no wonder that the Jackson Ski Touring Foundation is listed #1 in the US. For cross-country skiing close to Boston, the Weston Ski Track is recommended.
Fishing and Whale Watching

Boston is a worldwide destination fishery for striped bass, blue fin tuna, blue fish, flounder and cod. Salt-water fishing is especially popular, and colleagues with boats and experience are available within the program to introduce interested individuals to the sport. Boston Harbor has been completely cleaned up beginning in the 1980s with the installation of the massive Deer Island water treatment plant, and its waters are now pristine. Striped bass migrate north to Boston harbor in early May, and the 39 Boston Harbor Islands provide ideal structure and a very picturesque venue for striped bass fishing. In August and September, medium sized blue fin tuna (30 to 120 lbs) move into Cape Cod Bay near Boston, and feed actively on the surface, becoming prime targets for light tackle fly and spin fishing anglers. Tuna travel with whales, providing interesting whale watching opportunities on Stellwagen bank while searching for the elusive schools of tuna. Bluefish arrive around the same time as the tuna, and provide exciting surface action as they feed on schools of baitfish in Boston Harbor. Summer is the prime season for salt-water fishing in Boston, but for the dedicated fisherman or woman, large cod fish (up to 50 lbs.) can be successfully targeted with jigs year-around in waters just outside Boston Harbor. All fish species are safe to eat due to the successful harbor clean up. Fresh water fishing is also popular. Freshwater species include: large and small mouth bass, lake trout, perch, walleye, northern pike and land-locked salmon. Fly-fishing for trout in New England streams is also popular. And, for the hardy there is ice fishing in the winter.

Faculty member Tom Look with a striped bass caught in Boston Harbor on a fly rod
A variety of fellowship programs are offered at Children’s Hospital and Boston Medical Center for qualified physicians who have completed their residency training and want to prepare for academic careers in pediatrics or allied fields. The fellowships and fellowship contacts are listed here for intern applicants who want to explore fellowship opportunities as well as the BCRP residency.

Boston Children’s Hospital

**Adolescent Medicine**
S. Jean Emans, M.D.

**Allergy/Immunology**
Hans C. Oettgen, M.D., Ph.D.

**Cardiology**
David W. Brown, M.D.

**Child Neurology Residency**
Mustafa Sahin, PhD, M.D., Dir Residency Selection
David K. Urion, M.D., Program Director

**Clinical Neurophysiology/Epilepsy Fellowship**
Phillip Pearl, MD

**Critical Care**
Jeffrey P. Burns, M.D., M.P.H.

**Developmental Medicine**
**Developmental-Behavioral Pediatrics**
Lisa Albers Prock, M.D., M.P.H.

**Neurodevelopmental Disabilities**
David K. Urion, M.D.

**Emergency Medicine**
Joshua Nagler, M.D.

**Endocrinology**
Joseph A. Majzoub, M.D.

**Gastroenterology and Nutrition**
Paul A. Rufo, M.D.

**General Pediatrics**
**General Academic Pediatrics**
Joanne E. Cox, M.D.

**Pediatric Environmental Health**
Alan D. Woolf, M.D., M.P.H.

**Harvard Pediatric Health Services Research**
Jonathan Finkelstein, M.D.

**Genetics**
Amy E. Roberts, M.D.

**Global Health Services Delivery**
Kim A. Wilson, M.D.

**Hematology/Oncology**
David A. Williams, M.D.

**Global Health Research Fellowship**
Carlos Rodriguez-Galindo, M.D.

**Neuro-oncology Fellowship**
Mark W. Kieran, M.D., Ph.D.

**Palliative Care Fellowship**
Joanne Wolfe, M.D.

**Infectious Diseases**
Tanvi S. Sharma, M.D.

**Medical Toxicology**
Michele M. Burns Ewald, M.D.

**Nephrology**
David M. Briscoe, M.D.

**Newborn Medicine**
John A. F. Zupancic, M.D., Sc.D.

**Psychiatry**
Enrico Mezzacappa, M.D.

**Respiratory Diseases**
Debra M. Boyer, M.D.

**Rheumatology**
Hans C. Oettgen, M.D., Ph.D.

**Sports Medicine**
Pierre A. d’Hemecourt, M.D.

Boston Medical Center

**Child Neurology Residency**
Karl Kuban, M.D.

**Developmental and Behavioral Pediatrics**
Stephanie Bienner, M.D.

**General Academic Pediatrics**
Arvin Garg, M.D.

**Global Child Health Fellowship**
Bob Vinci, M.D.

**Infectious Diseases**
Ellen R. Cooper, M.D./Stephen I. Pelton, M.D.

**Pediatric Emergency Medicine**
David Dorfman, M.D.
Results

What Our Residents Do Next
The BCRP specializes in training academic pediatricians. Eighty-six percent of the program’s graduates during the past five years have continued on a pathway leading to an academic career. This is an exceptionally high percentage. The residents enter a wide variety of fields. Although some go to programs across the country, about 80% continue their training at Boston Children’s Hospital.

Careers of Our Residents
The “graduates” of the residency program during the past 40 years best illustrate the success of our approach to training and our ability to achieve our goal of training leaders in American pediatrics. To evaluate our success, one must consider the cohort who completed their residencies between 1968 and 1992. More recent residents are still finishing their training or are relatively early in their academic careers and have not reached their full potential.

Leadership Positions
The 1968-1992 cohort contains 559 individuals of whom we have follow-up information on 87 percent (as of 2007). Seventy-one percent of these are currently in academic medicine or are recently retired from academic positions and 44 percent are leaders in academic medicine. An additional 15 percent hold senior academic ranks. Thus, 83 percent of the group in academic medicine have reached positions of prominence. An additional 7% have had major success within the biotech or business community, as authors, or in other medical pursuits.

Select Societies and Awards
As of 2007, a remarkable number of the 1968-1992 graduates of our residency program were members of institutions that guide American medicine and pediatrics and that select their members based on scientific accomplishment.
• National Academy of Sciences and/or Academy’s Institute of Medicine - 12 members
• American Society of Clinical Investigation - 36 members
• American Pediatric Society - 84 members
• Society for Pediatric Research - 112 members

What Residents (N=430) Did in the Year Following Residency (2002-13)

<table>
<thead>
<tr>
<th>Number</th>
<th>%</th>
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<tbody>
<tr>
<td>Academic Career</td>
<td></td>
</tr>
<tr>
<td>462</td>
<td>90</td>
</tr>
<tr>
<td>Second residency or fellowship</td>
<td>376</td>
</tr>
<tr>
<td>Chief residency</td>
<td>57</td>
</tr>
<tr>
<td>Faculty</td>
<td>29</td>
</tr>
<tr>
<td>Practice Career (Private practice, neighborhood health centers &amp; HMOs)</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>10</td>
</tr>
</tbody>
</table>

Residencies and Fellowships Chosen (2002-13)

<table>
<thead>
<tr>
<th>No.</th>
<th>No.</th>
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<tbody>
<tr>
<td>Hematology/Oncology</td>
<td>59</td>
</tr>
<tr>
<td>Academic Pediatrics</td>
<td>46</td>
</tr>
<tr>
<td>Cardiology</td>
<td>42</td>
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<tr>
<td>Emergency Medicine</td>
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<tr>
<td>Critical Care</td>
<td>32</td>
</tr>
<tr>
<td>Neonatology</td>
<td>27</td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td>24</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>22</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>21</td>
</tr>
</tbody>
</table>

1968-1992 Residents: Current Jobs

<table>
<thead>
<tr>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Academic</td>
</tr>
<tr>
<td>Senior Administrator or Dean</td>
</tr>
<tr>
<td>Department Chair</td>
</tr>
<tr>
<td>Division Chief</td>
</tr>
<tr>
<td>Head of Major Clinical Program</td>
</tr>
<tr>
<td>Sr Researcher/Research Administrator</td>
</tr>
<tr>
<td>Educator</td>
</tr>
<tr>
<td>Senior Academician</td>
</tr>
<tr>
<td>Junior Academician</td>
</tr>
<tr>
<td>Nonacademic</td>
</tr>
<tr>
<td>Hospital-based private practice</td>
</tr>
<tr>
<td>Private practice</td>
</tr>
<tr>
<td>Authors</td>
</tr>
<tr>
<td>Business, Biotech or Biopharm</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>
National Academy of Science or Institute of Medicine

Residents (1968-1998) in the National Academy of Sciences and/or the Institute of Medicine

Nancy C. Andrews, MD, PhD  Isaac S. Kohane, MD, PhD
Donald M. Berwick, MD  Philip J. Landrigan, MD
Jan L. Breslow, MD  Stuart H. Orkin, MD
Jonathan E. Fielding, MD  Philip A. Pizzo, MD
Jonathan D. Gitlin, MD  Mark C. Rogers, MD
Alan E. Guttmacher, MD  Alan L. Schwartz, MD, PhD
Margaret K. Hostetter, MD

Society for Pediatric Research Young Investigator Award

Since the inception of the SPR Young Investigator award in 1983, Children's and/or BCRP residents have won 39% of the awards given.

Residents who won the SPR Young Investigator Award (year awarded)


Mead Johnson Award for Research in Pediatrics

The 1968-1996 graduates won 35% of the E. Mead Johnson awards (the most prestigious research award in pediatrics) that could have been won by their classes. Overall, Children's trainees and faculty have won 37% of the 154 awards given since the inception of the award in 1939 and 47% of the awards in the past two decades.

Residents (1968-1996) who were awarded the E. Mead Johnson award for research in pediatrics (year awarded)


Residents (1998-2007) in the National Academy of Sciences and/or the Institute of Medicine

Jan L. Breslow, MD  Isaac S. Kohane, MD, PhD
Stuart H. Orkin, MD  Philip J. Landrigan, MD
Mark C. Rogers, MD  Philip A. Pizzo, MD
Alan L. Schwartz, MD, PhD  Donald M. Berwick, MD
Jonathan E. Fielding, MD  Jonathan D. Gitlin, MD
Alan E. Guttmacher, MD  Nancy C. Andrews, MD, PhD
Margaret K. Hostetter, MD  Donald M. Berwick, MD

Residents (1968-1996) who were awarded the E. Mead Johnson award for research in pediatrics (year awarded)

Examples of Resident Careers

These examples are chosen from more than 250 leaders who graduated from residency between 1968 and 1992. The data were compiled in August 2007 and have been updated where changes in status are known. The year of graduation from residency is listed in parentheses.

Senior Administrators

Steven M. Altschuler, MD (1982) - President and CEO, Children's Hospital of Philadelphia
Jonathan R. Bates, MD (1976) - President and CEO, Arkansas Children's Hospital.
Donald M. Berwick, MD (1977) - Senior Fellow at the Center for American Progress. Previously, Director, US Government Centers for Medicare and Medicaid Services. Previously, President and CEO of the Institute for Healthcare Improvement; Lecturer, Department of Health Policy and Management, Harvard.
Kevin B. Churchwell, MD (1990) - Chief Operating Officer and Chief Medical Officer, Boston Children's Hospital. Previously, Sr Vice-President, Nemours and CEO, Nemours/Alfred I. duPont Hospital for Children in Wilmington, DE., and CEO and Executive Director, Monroe Carell Jr. Children's Hospital, Vanderbilt.
Patrick Conway (2005) - Chief Medical Officer and Director of the Office of Clinical Standards and Quality, US Government Centers for Medicaid and Medicare Service.
Alan L. Goldbloom, MD (1976) - President and CEO, Children's Hospitals and Clinics of Minnesota, St Paul, MN, Emeritus Vice President and CEO, Hospital for Sick Children, Toronto, Canada.
Steve A. N. Goldstein, MD, PhD (1989) - Provost, Brandeis University. Previously Chair, Dept of Pediatrics, Univ. of Chicago.
Raymond S. Greenberg, MD, PhD (1983) - President, Medical University of South Carolina.

Deans

Herbert T. Abelson, MD (1971) - Previously, Associate Dean of Admissions, Chicago, Chair, Dept. of Pediatrics, Univ. of Chicago, and Chair, Dept. of Pediatrics, Univ. of Washington, Seattle.
Nancy C. Andrews, MD, PhD (1990) - Dean, Duke University School of Medicine. Previously, Dean for Basic Sciences and Graduate Studies, Harvard Medical School and Investigator, Howard Hughes Medical Institute.
Ellis D. Avner, MD (1978) - Associate Dean for Research and Director, Children's Research Institute, Medical College of Wisconsin. Ex-Chair, Dept. of Pediatrics, Case-Western Reserve Univ. School of Medicine.
S. Bruce Downton, MD (1984) - Principal of Dowton Consulting International, Inc. Previously, Dean of Medicine and Professor of Pediatrics, University of New South Wales, Sydney, Australia, and Senior Vice-President and CEO, Partners Harvard Medical International.

Department Chairs

Harvey J. Cohen, MD, PhD (1973) - Chair Emeritus, Dept. of Pediatrics, Stanford.

Alan E. Guttmacher, MD (1985) - Director, National Institute of Child Health and Human Development. Previously, Deputy Director, National Human Genome Research Institute, Director, Office of Policy, Communications and Education, NIH
Mark C. Rogers, MD (1972) - Previously, Vice Chancellor of Health Systems, Duke Univ. Med. Ctr, Senior VP, Perkin-Elmer, and CEO Duke Hospital. Chairman and CEO of Bradmer Pharmaceuticals, Chairman of Cardiome Pharma Corp, and Chief Executive Officer of Paramount Capital Inc. Currently, Accounts Manager of AtCor Medical Limited.
John R. Schreiber, MD (1983) - CEO, Baystate Health and President, Baystate Medical Practices. Chair Emeritus, Dept. of Pediatrics, Tufts Univ and Dept of Pediatrics, Univ. of Minnesota.
Stephen P. Spielberg, MD, PhD (1976) - Previously, Dean, Dartmouth Medical School, Vice President of Pediatric Drug Development at Johnson & Johnson, and Deputy Commissioner of the Food and Drug Administration (FDA) for Medical Devices, Drugs, Biologics and Tobacco Products, and Special Medical Programs. Currently, Professor of Pediatrics and of Pharmacology and Toxicology at Dartmouth Medical School.
Donald L. Weaver, MD (1976) - Rear Admiral, US Public Health Service and previously, Acting Surgeon General, Deputy Associate Administrator for Primary Health Care in the Health Resources and Services Administration, and Director National Health Service Corps.

Lewis First, MD (1984) - Chair of Pediatrics and, previously, Senior Associate Dean, Educational and Curriculum Affairs, Vermont.
Jody Heymann, MD, PhD (1992) - Dean, Fielding School of Public Health, UCLA. Previously, Canada Research Chair in Global Health and Social Policy and Founding Director, Institute for Health and Social Policy, McGill University.
Alan M. Krenskey, MD (1980) - Vice Dean for Development and Alumni Relations, Northwestern Feinberg School of Medicine. Previously, Deputy Director, NIH, and Associate Dean for Child Health, Stanford Medical School.
Philip A. Pizzo, MD (1973) - Dean Emeritus, Stanford University School of Medicine. Emeritus Chair of Pediatrics and Physician-in-Chief, Boston Children's Hospital.
Norman Rosenblum, MD (1984) - Associate Dean, Physician-Scientist Training and Assoc Director, McLaughlin Centre for Molecular Medicine. Univ Toronto and Hosp for Sick Children.

J. Devn Cornish, MD, PhD (1981) - Chair Emeritus, Dept. of Pediatrics. Currently, Vice-Chair for Faculty Development, Emory.
Paul H. Dworkin, MD (1976) - Chair of Pediatrics and Physician-in-Chief, Connecticut Children’s Medical Center.
Erwin W. Gelfand, MD (1970) - Chair, Dept. of Pediatrics, National Jewish Hospital, Denver.
Jonathan D. Gitlin, MD (1981) - Chair Emeritus, Dept. of Pediatrics, Monroe Carell Jr. Children’s Hospital, Vanderbilt University.
Margaret K. “Peggy” Hostetter, MD (1978) - Chair, Dept. of Pediatrics, Cincinnati Children’s Hospital. Chair Emeritus, Dept. of Pediatrics, Yale.
Bruce Korf, MD, PhD (1983) - Chair, Dept. of Genetics, Alabama.
Philip J. Landrigan, MD (1970) - Professor & Chair, Dept. of Preventive Medicine and Director of the Children’s Environmental Health Center, Mt Sinai, NY.
Nobutake Matsuo, MD (1971) - Chairman Emeritus, Dept of Pediatrics, Keio University School of Medicine, Tokyo, Japan.
John F. Modlin, MD (1974) - Chair, Dept. of Pediatrics, Dartmouth.
E. Richard Moxon, MB BCh, FRS (1972) - Professor and Chair, Dept. of Paediatrics, University of Oxford.
Richard "Rick" J. O’Reilly, MD (1973) - Chair, Dept. of Pediatrics, Memorial Sloan-Kettering Cancer Institute

Division Chiefs

Kenneth Alexander, MD, PhD (1991) - Chief, Infectious Diseases, Chicago
Richard G. Bachur, MD (1992) - Chief, Div. of Emergency Medicine, Boston Children’s Hospital, Harvard
Charles Berde, MD, PhD (1983) - Chief, Division of Pain Medicine, Boston Children’s Hospital, Harvard.
Melvin Berger, MD (1979) - Chief Emeritus, Allergy/Immunology, Case-Western Reserve. Currently, Senior Medical Director, Clinical Research and Development, CSL, Behring, LLC.
Judith E. Brill, MD (1980) - Chief, Pediatric Critical Care, Mattel Children's Hospital, UCLA
Jeffrey P. Burns, MD (1991) - Chief, Critical Care Medicine, Boston Children's Hospital, Harvard
F. Sessions Cole, MD (1978) - Director of Pediatric Newborn Medicine, Vice-Chair, Dept. of Pediatrics, Washington Unv. School of Medicine, St Louis.
Jonathan M. Davis, MD (1984) - Chief, Newborn Medicine, Tufts.
S. Jean Emans, MD (1973) - Chief, Adolescent Med, Children’s Hosp Boston, Harvard Medical School
James J. Filiano, MD (1985) - Chief, Pediatric Critical Care, Dartmouth.
Raif S. Geha, MD (1971) - Chief, Div. of Allergy and Immunology, Boston Children’s Hospital, Harvard Medical School.
Stephen E. Gellis, MD (1976) - Chief, Division of Pediatric Dermatology, Boston Children's Hospital, Harvard Medical School.
Jeffrey S. Gerdes, MD (1980) - Chief, Section of Newborn Pediatrics, Associate Chair, Dept of Pediatrics, Pennsylvania Hospital.
Stuart H. Orkin, MD (1975) - Chair, Dept. of Pediatric Oncology, Dana-Farber Cancer Institute, Harvard Medical School, Investigator, Howard Hughes Medical Institute.
Scott Pomero, MD, PhD (1985) - Neurologist-in-Chief and Chair, Dept. of Neurology, Boston Children's Hospital, Harvard.
DeWayne M. Pursley, MD (1987) - Neonatologist-in-Chief, Beth Israel Deaconess Medical Center, Harvard Medical School
David S. Rosenblatt, MD (1976) - Chair, Dept. of Human Genetics, McGill.
Nina F. Schor, MD, PhD (1984) - Chair, Dept. of Pediatrics, Rochester.
Alan L. Schwartz, MD, PhD (1979) - Chair, Dept. of Pediatrics, Washington Univ., St Louis.
Charles F. Simmons Jr, MD (1983) - Chair, Dept. of Pediatrics, Cedars-Sinai Medical Center, Los Angeles.
Robert J. Vinci, MD (1980) – Chair, Dept. of Pediatrics and Pediatric Program Director, Boston Medical Center, Boston University School of Medicine.
Christopher B. Wilson, MD (1975) - Chair, Dept. of Immunology, Univ. of Washington, Seattle. Previously, Interim Director, Global Health Discovery, Bill and Melinda Gates Foundation.
Ira H. Gewolb, MD (1979) - Chief, Neonatology and Assoc Chair for Research, Michigan State
Catherine M. Gordon, MD (1994) Chief, Division of Endocrinology, Brown
Ian Gross, MD (1972) - Chief, Div. of Perinatal Medicine, Yale.
Jin S. Hahn, MD (1985) - Chief Emeritus, Div. of Neurology, Stanford
William E. Harmon, MD (1974) - Chief Emeritus, Nephrology, Boston Children’s Hospital, Harvard Medical School.
Jeffrey S. Hyams, MD (1978) - Head, Div. of Gastroenterology and Nutrition, Connecticut Children's Medical Center
Janice D. Key, MD (1983) - Director, Div. of Adolescent Medicine, Medical Univ. of South Carolina.
Barry Kosofsky, MD, PhD (1988) - Chief, Div. of Pediatric Neurology, Cornell.
Karl Kuban, MD (1978) - Chief, Pediatric Neurology, Boston Medical Center, Boston Univ.
Andrew L. Kung, MD, PhD (1996) - Chief, Division of Hematology, Oncology and Bone Marrow Transplantation, Columbia
Roger L. Ladda, MD (1972) - Chief, Human Genetics, Growth & Development, Penn State.
Edward Lawson, MD (1975) - Director, Neonatal-Perinatal Medicine, Johns Hopkins.
Donald Y.M. Leung, MD, PhD (1980) - Head, Div. of Pediatric Allergy and Immunology, National Jewish Medical and Research Center, Denver,
Michael Link, MD (1977) - Chief, Pediatric Hematology/Oncology, Stanford

Jeffrey M. Lipton, MD, PhD (1978) - Chief, Hematology-Oncology and Stem Cell Transplantation, Schneider Children’s Hospital, Albert Einstein.

Samuel E. Lux IV, MD (1970) - Chief Emeritus, Div. of Hematology/Oncology and Vice-Chair for Research, Boston Children’s Hospital, Harvard Medical School.

William Maniscalco, MD (1975) - Chief, Div. of Neonatology, Rochester.

Peter E. Newburger, MD (1977) - Chief, Pediatric Hematology/Oncology, Univ. of Massachusetts

John A. Phillips III, MD (1975) - Director, Div. of Genetics and Genomic Medicine, Vanderbilt.


David G. Poplack, MD (1972) - Chief, Pediatric Hematology/Oncology, Baylor.

Leonard A. Rappaport, MD (1980) - Chief, Division of Developmental Medicine, Boston Children’s Hospital, Harvard.

J. Routt Reigart II, MD (1970) - Director Emeritus, General Pediatrics, Medical Univ. of South Carolina.

Clement L. Ren, MD (1990) - Chief, Div. of Pediatric Pulmonology/Allergy, Rochester.

Mark E. Rothenberg, MD, PhD (1992) - Director, Div of Allergy/Immunology, Cincinnati.

David H. Rowitch, MD, PhD (1992) - Chief, Div. of Neonatology, UCSF.

Corrie T. M. Anderson, MD (1985) - Previously Clinical Program Director, Pain Management, Dept. of Anesthesia, Univ. of Washington, Seattle

Marc Baskin, MD (1986) - Chief, Short Stay Unit, Boston Children’s Hospital, Harvard.

Leslie V. Boyer-Hassen, MD (1988) - Medical Director, Arizona Poison Control Ctr, Medical Director, Toxicology Laboratory, Arizona.

Lisa R. Diller, MD (1988) - Clinical Director of Pediatric Oncology, Dana-Farber Cancer Institute and Boston Children’s Hospital, Harvard Medical School.


Edgar K. Marcuse, MD (1970) - Associate Medical Director of Quality Improvement, Univ. of Washington, Seattle.

Lynne M. Mofenson, MD (1980) - Chief, Pediatric, Adolescent and Maternal AIDS Branch. Center for Research for Mothers and Children, NICHD, NIH.

D. Holmes Morton, MD (1986) - Director, Clinic for Special Children, Strasburg, PA.

James Moses, MD MPH (2005) - Director of Quality and Patient Safety, Department of Pediatrics, Boston Medical Center.

Ellis J. Neufeld, MD, PhD (1988) - Associate Chief, Hematology/Oncology and Chief, Clinical Research Center, Boston Children’s Hospital, Harvard Medical School.

Philip J. Saul, MD (1985) - Chief, Div. of Pediatric Cardiology, Medical Univ. of South Carolina.

Charles D. Scher, MD (1972) - Chief, Pediatric Hematology-Oncology, Tulane.

Mark A. Schuster, MD, PhD (1991) - Chief of General Pediatrics, Boston Children’s Hospital, Harvard Medical School. Formerly, Chief of General Pediatrics and Vice Chair for Health Services, Policy, and Community Research, UCLA.

Robert D. Sege, MD, PhD (1991) - Previously, Director, Div. of Ambulatory Pediatrics, Boston Medical Center, Boston Univ.


Victor C. Strasburger, MD (1978) - Chief, Div. of Adolescent Medicine, New Mexico.

Stephen J. Teach, MD (1991) - Chief, Div. of Allergy and Immunology, Children’s National Medical Center.


Alan S. Wayne, MD (1988) - Chief, Division of Pediatric Hematology/Oncology, Univ of Southern California. Previously, Head, Hematologic Diseases Section, Pediatric Oncology Branch, National Cancer Institute, NIH.

Lawrence C. Wolfe, MD (1979) - Chief Emeritus, Div. of Pediatric Hematology/Oncology, Tufts. Currently at Schneider Children’s Hospital, New Hyde Park, NY.

Peter F. Wright, MD (1970) - Chief Emeritus, Div. of Pediatric Infectious Diseases, Vanderbilt. Currently at Dartmouth-Hitchcock Medical Center.

Boston Children’s Hospital, Harvard Medical School.

Jane Newburger, MD (1977) - Associate Chief for Academic Affairs, Dept. of Cardiology, Boston Children’s Hospital, Harvard Medical School.

Hans C. Oettgen, MD, PhD (1990) - Associate Chief, Div. of Allergy/Immunology, Boston Children’s Hospital, Harvard Medical School.


Thomas N. Robinson, MD (1991) - Director, Ctr for Healthy Weight, Div of General Pediatrics, Stanford.

Jonathan J. "Jack" Rome, MD (1986) - Director, Cardiac Catheterization Laboratory, Associate Chief for Clinical Affairs, Children's Hospital of Philadelphia.

Stephen J. Roth, MD (1989) - Director of Pediatric Cardiovascular Intensive Care, Stanford.

Benjamin L. Shneider, MD (1989) - Director, Hepatology Center, Children’s Hospital of Pittsburgh.

Anne M. Stack, MD (1991) - Director of Clinical Operations, Div of Emergency Medicine, Boston Children’s Hospital, Harvard Medical School.

Elizabeth Woods, MD (1982) - Associate Chief, Div of Adolescent/Young Adult Medicine, Boston Children’s Hospital, Harvard Medical School.
Senior Researchers and Research Administrators

Scott A. Armstrong, MD, PhD (1998) - Director, Leukemia Center, Memorial Sloan Kettering Cancer Center
Diana W. Bianchi, MD (1983) - Vice Chair for Research, Dept. of Pediatrics, Tufts.
Jan L. Breslow, MD (1971) - Head, Lab of Biochemical Genetics and Metabolism, Rockefeller Univ. Past-President, American Heart Association.
Todd R. Golub, MD (1992) - Director, Cancer Program, The Broad Institute of Harvard and MIT. Professor, Pediatrics, Boston Children's Hospital and Dana-Farber Cancer Institute. Investigator, Howard Hughes Medical Institute.
Lisa Guay-Woodford, MD (1986) - Director, Ctr for Translational Science, Children's National Medical Center, Washington, DC. Previously, Director, Division of Genetic and Translational Medicine and Vice Chair, Dept of Genetics, Univ. of Alabama.
Mark A. Israel, MD (1976) - Director, Norris Cotton Cancer Center, Dartmouth.
Julie R. Korenberg, MD, PhD (1982) - Director, Center for Integrated Neurosciences and Human Behavior at the Brain Institute, Utah. Previously, Director of Pediatric Research and Director of Neurogenetics, Medical Genetics Inst. Vice-Chair for Pediatrics Research, Cedars-Sinai, Los Angeles.
Stephan Ladisch, MD (1976) - Previously, Director, Ctr for Cancer and Transplantation Biology and Scientific Dir., Children's Research Inst., Vice-Chair, Pediatrics, George Washington.

Education Leaders

Anne E. Trontell, MD (1990) - Program Director, Center for Education & Research on Therapeutics. Agency for Healthcare Research and Quality, Dept. of Health and Human Services.
Paul H. Wise, MD (1981) - Director, Center for Policy, Outcomes and Prevention, Stanford.
William A. "Jerry" Durbin, MD (1977) - Vice Chair and Residency Program Director, Dept. of Pediatrics, Univ. Massachusetts.
Frederick H. Lovejoy Jr, MD (1969) - Vice Chair for Academic Affairs and Associate Physician-in-Chief. Previously, Residency Program Director, Boston Children's Hospital, Harvard Medical School.

Theodore C. Sectish, MD (1980) - Vice Chair for Education and Pediatric Residency Program Director, Boston Children's Hospital, Harvard Medical School. Executive Director, Federation of Pediatric Organizations. Previously, Residency Program Director, Stanford. Past-President of the Association of Pediatric Program Directors.

Biotech or Other Business Leaders

Emmett V. Schmidt, MD, PhD (1984) - Previously, Pediatric Residency Program Director, MassGeneral Hospital for Children, Harvard Medical School.
Edwin Zalneraitis, MD (1978) - Assistant Dean for Medical Education and Residency Program Director, Connecticut.
Spencer Borden IV, MD, MBA (1971) - Senior Managing Scientist, Exponent Consulting and Director of Employer Outcomes Research, Johnson & Johnson Health Care Systems, Inc. Previously, Senior Medical Consultant of Watson Wyatt Worldwide; Medical Director of Value Health Sciences, MediQual Systems and of Aetna Life Insurance Company; and CEO, Integrity Consulting. Emeritus Chair, Depts of Pediatric Radiology, CHOP & MGH.
Kenneth M. Borow, MD (1977) - President and CEO Encomium Group, Inc. Previously, President and CEO, Covalent Group, Inc.
Michael J. Brownstein, MD, PhD (1974) - Co-Founder and Chairman of the Board, Alluvium Biosciences. Previously, Chief Scientific Officer, Exponential Biotherapies, Bethesda, MD.

Roderick R. McInnes, MD, PhD (1978) - Director of Research, Lady Davis Institute of Medical Research, Jewish General Hospital, McGill. Previously, University Professor, Chair, Dept of Molecular Medicine and Scientific Dir., Inst. of Genetics, Hosp for Sick Children, Toronto.
Louis J. Muglia, MD, PhD (1991) - Co-Director, Perinatal Institute, Division of Neonatology and Director, Center for Prevention of Preterm Birth, Cincinnati Children's. Previously, Vice Chair for Research Affairs in Pediatrics, Vanderbilt and Director, Div. of Pediatric Endocrinology and Diabetes, Washington University, St Louis.
Stuart H. Orkin, MD (1975) - Investigator, Howard Hughes Medical Institute, Boston Children's Hospital. Chair, Dept. of Pediatric Oncology, Dana-Farber Cancer Institute. Harvard Medical School.
David S. Pellman, MD (1989) - Investigator, Howard Hughes Medical Institute. Professor, Pediatrics, Dana-Farber Cancer Institute and Boston Children's Hospital. Harvard Medical School.
Edward V. Prochownik, MD, PhD (1981) - Director of Oncology Research, Pittsburgh.
Bonnie W. Ramsey, MD (1979) - Director, Center for Clinical and Translational Research, Univ. of Washington.
Evon Y. Snyder, MD, PhD (1983) - Program Director, Stem Cells and Regeneration, Burnham Institute, LaJolla.

Affairs of Functional Genomics, J Craig Venter Institute, Rockville, MD, and Chief, Laboratory of Genetics, NIMH/NHGRI, NIH.
R. Alan B. Ezekowitz, MB ChB, DPhil (1988) - President, Co-Founder and CEO, Abide Therapeutics. Previously, Senior Vice President and Franchise Head, Immunology, Respiratory and Endocrine, Merck Research Laboratories. Chief, Department of Pediatrics, Massachusetts General Hospital, Harvard Medical School.
Roslyn Feder, MD, PhD (1988) - Previously, Senior Vice President for External Development at Bristol-Myers Squibb.
William H. Harris, MD, PhD (1984) - Co-Founder, President and Chief Scientific Officer, Maricel, Inc., Portland, ME.
Allen J. Hinkle, MD (1979) - Executive Vice President and Medical Affairs Officer, MVP Health Care. Previously, Sr Vice President and Chief Medical Officer, Tufts Health Plan and Senior Medical Director and Vice President of Health Care Affairs and Associate Physician-in-Chief. Previously, Residency Program Director, Boston Children's Hospital, Harvard Medical School.

Theodore C. Sectish, MD (1980) - Vice Chair for Education and Pediatric Residency Program Director, Boston Children's Hospital, Harvard Medical School. Executive Director, Federation of Pediatric Organizations. Previously, Residency Program Director, Stanford. Past-President of the Association of Pediatric Program Directors.
Quality, Policy and Innovations at Blue Cross Blue Shield of Massachusetts.

David S. Hodes, MD (1972) - Previously, Medical Director, Roche Laboratories. Chief Emeritus, Pediatric Infectious Diseases, Mt Sinai

Anula Jayasuriya, MD, PhD, MBA (1992) - Life science private equity and venture capital investor with ATP Capital. ASTIA Inc. in San Francisco. Co-founder and Managing Director of the Evolve Inc Life Science Fund, based in Hyderabad. Previously a partner with Skyline Ventures, a principal with Techno Venture Management, and Vice President and Head of Corporate Development for Genomics Collaborative.

Authors

Critical Care, Johns Hopkins; Vice Chancellor of Health Systems, Duke Univ. Med. Ctr and CEO Duke Hospital.

James (Jim) Woody, MD, PhD (1971) - Venture Capital Partner, Latterell Venture Partners, Menlo Park, CA. Formerly President of Roche Bioscience in Palo Alto, California. Previously, Chief Scientific Officer and Senior Vice President of R&D for Centocor.


Claire McCarthy, MD (1991) - Medical Communications Director, Boston Children’s Hospital and Senior Medical Editor for Harvard Health Publications. Author of two books (“How the Heart Beats” and “Everyone’s Children”) and frequent contributor to Newsweek and other magazines. Previously, General Pediatrician Director, Martha Eliot Health Center, Boston Children’s Hospital, Harvard.

Other Leaders

David M. Bell, MD (1980) - Sr Medical Officer, Maternal and Child Health Branch, Division of HIV/AIDS, National Center for Infectious Diseases, Centers for Disease Control and Prevention.

Jonathan E. Fielding, MD, MPH, MBA (1972) - Director of Public Health and Public Health Officer, Los Angeles County, and Professor of Public Health and Pediatrics, UCLA. Previously, Vice President, Johnson & Johnson; and Massachusetts Commissioner of Public Health.

Jed Gorlin, MD (1985) - Medical Director, Memorial Blood Centers, Minneapolis.

Richard A. Insel, MD (1972) - Chief Scientific Officer, Juvenile Diabetes Research Foundation International. Previously, Director of the Center for Human Genetics and Molecular Pediatric Disease, Rochester.

Isaac S. "Zak" Kohane, MD, PhD (1990) - Director, Children’s Hospital Informatics Program; Co-director, Center for Biomedical Informatics, Harvard Medical School; Director, Countway Library of Medicine, Harvard Medical School.

Nabil M. Kronfol, MD (1972) - Professor, Health Services Administration, American University of Beirut; Senior Consultant, Health Systems and Health Manpower, President of the Lebanese Health Care Management Association, Beirut.

Jon E. Rohde, MD (1973) - International Public Health Consultant. Professor and Co-chair of the Board of the James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh. Former Director of the EQUITY Project, South Africa and Emeritus Professor, University of Cape Town, SA.

Lauren A. Smith, MD (1996) - Director Emeritus and before that Medical Director of the Massachusetts Department of Public Health.
What Are We Looking For?

Graduates of medical schools in the United States and other countries are eligible to apply. We seek applicants who are intelligent, curious, creative, energetic, personable, and accomplished. We are very interested in having a diverse residency class and wish to attract exceptional applicants with wide-ranging interests and talents from all parts of the country and beyond. We are especially interested in those who will become leaders in one or more of the many areas of academic pediatrics: medical care, laboratory or clinical research, teaching, patient advocacy, public policy or global health.

PL-1 Applicants

Three Year Pediatric Residency Positions

We accept up to 31 PL-1 residents in the Categorical Track and up to 11 residents in the Urban Health and Advocacy Track. For PL-1 positions, the Boston Combined Residency Program in Pediatrics (BCRP) participates in the National Resident Matching Program (NRMP) through the Electronic Residency Application Service (ERAS). Applications will only be accepted through ERAS.

Candidates may apply to either one or both tracks. We recommend applying to both. Each track has its own NRMP match number. The tracks are listed in the NRMP Directory as follows:

Boston Combined Residency Program in Pediatrics
- Peds/Boston Children’s Hospital: #1259320C0
- Peds-Urban Health Advocacy/Boston Medical Center: #1259320C1

Two Year Pediatric Residency Positions

- Fast-tracking: We allow residents to enter both of the “fast-tracking” research pathways offered by the American Board of Pediatrics.
- Combined Pediatrics-Medical Genetics: We are happy to consider applicants who would like to participate in a combined residency program with Medical Genetics. We can accommodate up to two such positions a year. Applicants interested in the program should contact Dr. Amy Roberts (amy.roberts@cardio.chboston.org). The application is submitted as described above for PL-1 applicants. Please clarify in either your personal statement or by separate communication with Drs. Roberts and Lux (lux@enders.tch.harvard.edu) that you are interested in the combined program. Those invited for a BCRP interview will have additional interviews with the clinical genetics faculty. The combined program has its own NRMP Match number listed in the NRMP Directory as: Pediatrics/Medical Genetics #7652444017. Applicants interested in the combined Pediatric-Medical Genetics program should also apply to the BCRP and make their interest in genetics clear in their personal statement.

- Child Neurology–Boston Children’s Hospital: We offer 2-year positions for a subset of residents who match in the child neurology residencies at Boston Children’s Hospital or Boston Medical Center, but who first need to complete two years of pediatric residency training.

There are two types of slots available in the Child Neurology program at Boston Children’s Hospital:

- “Boston Children’s Hospital offers a combined BCRP Pediatrics-Child Neurology program (termed the “Categorical Child Neurology” program) in which the match is for 2 years of general pediatrics (beginning 2015) in the Categorical Track of the Boston Combined Residency Program in pediatrics, and three years of child neurology at Boston Children’s Hospital (beginning 2017). We have three to four positions in this program. Applicants who match in this track are guaranteed a position in the BCRP. The NRMP Match number for the combined BCRP Pediatrics-BCH Child Neurology program is #1259185C0. Applicants to...
the categorical child neurology track should also apply to the Categorical Track of the BCRP (#1259320C0) as this simplifies processing of the combined application. They should make their intentions clear in their personal statement.

The Children’s Hospital Neurology Department also offers an additional one or more “Advanced Child Neurology” positions for 3 years of child neurology, which will begin in 2017. Applicants who match in the Advanced positions must match independently in pediatrics as they will not have a position in the BCRP residency class. The NRMP Match number for this track is #1259185A0.

The total number of Categorical and Advanced Child Neurology positions is five.

- **Child Neurology—Boston Medical Center**: The child neurology program at Boston Medical Center offers one Categorical and one Advanced position. Applicants who match in the Categorical position are guaranteed a position in the UHAT track in the BCRP beginning in 2015 and will begin their child neurology training in 2017. Applicants who match in the Advanced position will begin their child neurology training at BMC in 2017 but must match independently in pediatrics. The NRMP Match number for the Categorical track is 1257185C0. The number for the Advanced track is #1257185A0. Applicants interested in any of this Child Neurology program should also apply to the UHAT track in the BCRP and make their interest in child neurology clear in their personal statement.

Each of the various neurology tracks can be ranked independently in the match.

- **Neurodevelopmental Disabilities Preliminary Position**: The BCRP offers one two-year Preliminary-NDD position (#1259320P1) in the Categorical track of the BCRP to those who match in the Boston Children’s Hospital Neurodevelopmental Disabilities (NDD) training program (#1259186A0). NDD is an ACGME-accredited program combining 2-years of pediatric training with 1-year of adult neurology and adult NDD, 18-months of clinical NDD and child neurology, and 18-months of basic and clinical sciences. Upon completion of the training, the resident is board eligible for Pediatrics, Neurology, and Neurodevelopmental Disabilities with Special Competency in Child Neurology.

Children’s Hospital only offers an Advanced four-year NDD position, which begins in 2017. However, the linked two-year BCRP Preliminary position allows applicants to complete their entire six-year NDD training in Boston.

NDD applicants should contact Dr. David Urion (david.urion@childrens.harvard.edu), who leads both the NDD and Child Neurology training programs at Boston Children’s Hospital.

NDD applicants interested in the Preliminary pediatrics position should apply for a Categorical position in the BCRP as well as to the Preliminary match. This is very important as it makes it much easier for us to process the application. They should also make their interest in NDD clear in their personal statement.

- **Combined Pediatrics-Anesthesiology**: The BCRP was one of the first residency programs to offer combined training in Pediatrics and Anesthesiology. Residents begin their first year in pediatrics residency. The following year is the first year of anesthesiology training, followed by three years of integrated residency training in both pediatrics and anesthesiology. Throughout the three years of integrated training, while residents are doing core training in Pediatrics or Anesthesiology, they will be expected to attend conferences and participate in core clinical activities once a month in the other discipline to make the combined program fully integrated.

Individuals ideally suited for this combined training will likely pursue careers at the interface between critical care, pediatrics, and anesthesiology. Examples of such careers include hospitalist medicine, pain and palliative care, out-of-operating room procedural and sedations services, and members of integrated subspecialty teams in pediatrics, critical care and anesthesiology.

Applicants interested in Pediatrics-Anesthesiology should make their interest evident in their personal statement or by separate communication with Dr. Sam Lux. They should also notify Dr. Morana Lasic, who directs resident selection in Anesthesiology at the Brigham and Women’s Hospital. Applicants should apply to Pediatric Anesthesiology in ERAS (#1259726C0). They should also apply to the Categorical Track of the BCRP (#1259320C0) and check the Pediatrics-Anesthesiology track in the BCRP. This is very important as it makes it much easier for us to process the application. We will forward a copy of the application to Dr. Lasic.

Applicants may also apply to the Categorical or UHAT pediatrics tracks in the BCRP if they wish. Applicants who also wish to apply to Categorical Anesthesiology at the Brigham should submit a separate application to that program and make their interest in the combined program as well as the categorical anesthesiology program clear in their personal statement in that application.
One Year Pediatric Residency Positions

We currently do not offer one-year preliminary positions in pediatrics.

Deadline

All PL-1 applications should be received by October 31, 2014. While we will consider applications received after that date, interviews are only occasionally granted to late applicants. Because of the volume, we appreciate receiving applications early.

Applicants should update their applications anytime they have significant new information (e.g., election to AOA or other honors, Step II scores, acceptance of a major paper, etc.). To ensure the information is noted, they should also email Dr. Sam Lux.

Applicants who accept an appointment elsewhere, or who for any reason wish to withdraw, are requested to notify Dr. Lux and the NRMP immediately.

Requirements

The application must include the following:

- Dean’s letter (MSPE) and transcript
- Application form
- At least three letters of reference. At least one should be from someone who worked closely with you on a pediatrics rotation and who writes many letters for students, such as the student clerkship director, the director of inpatient services, a senior clinician, or one of the residency program directors. A pro forma “departmental letter” is not requested or desired unless the writer(s) know the applicant well.
- Curriculum vita, including honors and publications
- USLME scores (Step I required, Steps II and III if available)
- Personal statement. While we recognize that most applicants use a generic personal statement for all applications, we are much more interested in learning about you personally, than about why you chose pediatrics. We want to know where you grew up and your accomplishments (things you’re proud of), your passions, your specific research experiences, your leadership experiences, creative or unusual things you’ve done, and what you are thinking of doing beyond your residency. Please attach an addendum to your generic personal statement discussing these things if they are not otherwise covered.

- Good quality color photograph (ideally head and shoulders with a plain background)
- Applicants with an MD/PhD or other comparable extensive research experiences should also include a letter from their research supervisor

International Applicants

We are very interested in training the very best international medical graduates and have a long record of doing so. All international medical graduates must apply through ERAS.

- To be seriously considered, international medical graduates must have an exceptional medical school record and have received the kinds of prizes, medals or awards that are given to the very top students. In most cases they will also have a strong record of accomplishment in research, or prior residency training in pediatrics, or both.
- International applicants should be ECFMG certified by October 31, 2014, our application deadline, and must be ECFMG certified by the completion of interviews on Jan 21st or they will not be considered by the selection committee. In rare cases an exception will be made for candidates who will graduate at the end of the calendar year and cannot apply for ECFMG certification until they have graduated. In these cases the applicant must obtain the approval of Dr Lux and must pass all ECFMG examinations by Jan 21st. This includes USMLE Step 1, the Step 2 Clinical Knowledge test, and the Step 2 Clinical Skills test. For all international medical graduates.
- USMLE scores must be above 210 on the first attempt and ideally should be above 230.
• Applicants must demonstrate excellent spoken and written English and the ability to work in a modern, high complexity medical center. This is best done by one or more rotations during medical school involving direct patient contact on a pediatric or internal medicine inpatient or consult service at a major teaching hospital in the United States or other English-speaking country. Applicants who lack such rotations will be considered if they have an exceptional academic record in medical school, have trained at other outstanding medical centers, have high USMLE scores, and have extensive research experience.

• At least one of the letters of recommendation must be from the physician supervising the internal medicine or pediatric rotation described above. At least one of the other letters of recommendation should also be from an individual familiar with the applicant’s clinical skills. Letters from physicians at the applicant’s medical school or other training institution(s) who have trained in the US are especially useful. **We do not find "observerships" useful in evaluating applicants** and suggest that applicants not have letters sent from those who observed them on such experiences unless the applicant worked very closely with the letter writer for a considerable period in caring for patients.

Our two hospitals are able to sponsor both H1b and J1 visas, assuming there are no changes in US Immigration policies. With rare exceptions we can only obtain H1b visas for those who have successfully completed the USMLE step 3 examination by January 21, 2015.

**Couples Match**

Applicants who are participating in the couples match and are invited to interview should email Dr Lux the name of the Boston-area hospital(s) to which their spouse or significant other is interviewing.

**Student Rotations**

**Children’s Hospital**

Students interested in doing rotations in pediatrics or pediatric subspecialties at Boston Children’s Hospital should contact the Registrar’s Office at Harvard Medical School. Students can rank up to three electives for a given month. The Registrar gives priority to Harvard Medical students, so outside students sometimes won’t know their elective until a few weeks before it begins. If all their choices are full, the Registrar will check if there are any vacancies in the less popular electives.

**Boston Medical Center**

Students interested in doing elective rotations at Boston Medical Center should contact the Registrar’s office at Boston University School of Medicine. BUSM does not accept international medical students for elective rotations.

**Minority Recruitment**

Boston Medical Center and Harvard Medical School have well-established Minority Recruitment Programs. These programs provide housing and financial assistance for travel.

**Observerships**

Neither Children’s Hospital nor Boston Medical Center encourage rotations where students function simply as observers.

**Interviews**

We issue invitations for interviews when enough information is available for us to make a decision. In most cases this is not until after Dean’s Letters arrive on October 1st. This is almost always the case for institutions where clerkship grades are only revealed in the Dean’s Letter. **However, we usually do not finish reading all our applications until early- to mid-November, so applicants should not expect to hear from us before then. We expect that all applicants will be notified about their interview on or before November 12th unless applications are incomplete at that time. As noted earlier, we review applications that are received after the October 31st deadline, but interviews are only rarely granted to those who apply late unless there are extenuating circumstances.**

**Interview days for 2014-2015**

• Monday, November 24th
• Tuesday, December 2nd
• Friday, December 12th
• Monday, December 15th
• Friday, December 19th
• Tuesday, January 6th
• Friday, January 9th
• Friday, January 16th
• Tuesday, January 20th

Approximately 32 candidates are invited for each interview day.
MD/PhD Days

Candidates with MD/PhD degrees or PhD-like research experiences who plan research careers following residency are invited to participate in additional sessions on one of the Thursday afternoons before the December 19th and January 16th interview days. These sessions have been very popular in the past. They are designed to acquaint applicants with the research and fellowship opportunities in the Boston area and give them a chance to meet several scientists in their areas of interest. The applicants also have dinner with residents who plan to become physician-scientists. The MD/PhD days are entirely optional and are not part of the evaluation process.

Minority Applicant Dinners

Underrepresented minority candidates are invited for an informal evening gathering before their interview to familiarize them with special opportunities available within the BCRP and discuss any questions they may have about the program or the local community.

The Interview Day

Orientation for the day begins with breakfast at 7:30 AM. Half the group starts at Children’s Hospital and half at Boston Medical Center. There is a single interview and a tour at each hospital by one of the BCRP residents. The interviews are low key and are meant to be an opportunity for applicants and faculty to get to know each other. An effort is made to choose interviewers who have something in common with the applicants, though this is not always possible. Applicants also attend one of the morning rounds and participate in informal information and question-answer sessions. They are then transported to the other hospital, where they lunch with the residents and repeat the itinerary. The day officially ends at 4:30 PM; however, there is an optional Happy Hour from about 6 pm to 8 PM, hosted by the residents. This is a great chance for those who can stay to talk with the residents and is **highly recommended**. Most applicants tell us this is one of the most important parts of the day. Some applicants may wish to extend their visit, or come a day early to allow more time for observation on the clinical services or to meet individuals in their specific areas of interest. We are happy to help make such arrangements, if desired.
Med-Peds Applicants

The Harvard BWH/BCH Medicine-Pediatrics Residency is located at the Brigham and Women’s Hospital and Boston Children’s Hospital. Interviews occur in December and January and are independent of pediatric and internal medicine interviews at the two hospitals. For more information about the program and how to submit an application please visit: http://www.brighamandwomens.org/Departments_and_Services/medicine/medical_professionals/residency/MedPeds/default.aspx?sub=1

How To Get Here

Transportation

Boston Children’s Hospital and Boston Medical Center are accessible by car, bus or subway. For those who wish to take public transportation (the MBTA or just “The T”), the Blue line stops at the airport (shuttle buses run from each terminal to the T stop). The MBTA trip-planning site (http://www.mbta.com/first.aspx) is particularly useful in choosing which subway trains and/or buses to take. Just enter “Logan Airport” and “Children’s Hospital” or “Boston Medical Center” in the boxes where addresses are requested. For those who drive, parking garages are available at each institution.

Maps

• Children’s Hospital Directions
  https://apps.childrenshospital.org/bcrp/Site2219/Documents/CHB_Directions0406.pdf

• Children’s Hospital Buildings
  http://www.childrenshospital.org/-/media/BCH/Locations/BCHCampusMap062013.ashx

• Harvard Medical School & Longwood Medical Area
  http://hms.harvard.edu/sites/default/files/assets/Sites/Parking/files/HvdCampusMap.pdf
  http://www.brighamandwomens.org/about_bwh/locations/directions/map2.aspx
  http://campustour.hms.harvard.edu/#UMAP_2014022756162

• Boston Medical Center
  http://www.bmc.org/patients/map.htm

Children’s Hospital also had a new downloadable iPhone/Android app for families called MyWay Mobile App (http://childrenshospital.org/patientsfamilies/Site1393/mainpageS1393P474.html) that contains useful information about how to get around the hospital and local places to stay, among other things.

Where To Stay

• Hotels near Children's Hospital

  The Inn at Longwood next to the hospital (342 Longwood Ave, Boston) and The Marriott Courtyard (40 Webster St, Brookline) offer hospital-discounted rates.

• Inns and Bed & Breakfasts near Children's Hospital
  http://www.childrenshospital.org/-/media/Patient%20Resources/Accommodations/Inns_3%20%2027%20%2013.ashx

• Hotels near Boston Medical Center

Many applicants also stay in the homes of friends. In addition, the residents offer a hosting service where they invite applicants to stay in their homes. They will contact applicants directly about this after interview invitations are extended.
Contacts

Boston Combined Residency Program in Pediatrics
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